<110> Rosen et al.

<120> 64 Human Secreted Proteins

<130> PZ011

<140> Unassigned
<141> 2001-02-06

<150> 60/180,909
<151> 2000-02-08

<150> 09/669,688
<151> 2000-09-26

<150> 09/229,982
<151> 1999-01-14

<150> 1998-07-15
<151> PCT/US98/14613

<150> 1997-07-16
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<150> 1997-07-22
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<150> 1997-08-18
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<160> 294

<170> PatentIn Ver. 2.0


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<212> DNA
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tctcccggac tcctgaggtc acatgcgtgg tggtggacgt aagccacgaa gaccctgagg      180
tcaagttcaa ctggtacgtg gacggcgtgg aggtgcataa tgccaagaca aagccgcggg      240
aggagcagta caacagcacg taccgtgtgg tcagcgtcct caccgtcctg caccaggact      300
ggctgaatgg caaggagtac aagtgcaagg tctccaacaa agccctccca accccatcg      360
agaaaaccat ctccaaagcc aaagggcagc cccgagaacc acaggtgtac accctgcccc      420
catcccggga tgagctgacc aagaaccagg tcagcctgac ctgcctggtc aaaggcttct      480
atccaagcga catcgccgtg gagtgggaga gcaatgggca gccggagaac aactacaaga      540
ccacgcctcc cgtgctggac tccgacggct ccttcttcct ctacagcaag ctcaccgtgg      600
acaagagcag gtggcagcag gggaacgtct tctcatgctc cgtgatgcat gaggctctgc      660
acaaccacta cacgcagaag agcctctccc tgtctccggg taaatgagtg cgacggccgc      720
gactctagag gat                                                        733


<210> 2
<211> 5
<212> PRT
<213> Homo sapiens

<220>
<221> Site
<222> (3)
<223> Xaa equals any of the twenty naturally ocurring L-amino acids

<400> 2
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Trp Ser Xaa Trp Ser
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<210> 3
<211> 86
<212> DNA
<213> Homo sapiens

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cccgaaatat ctgccatctc aattag   86

<210> 4
<211> 27
<212> DNA
<213> Homo sapiens

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<210> 5
<211> 271
<212> DNA
<213> Homo sapiens

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gcccctaact ccgcccagtt ccgcccattc tccgccccat ggctgactaa ttttttttat   180
ttatgcagag gccgaggccg cctcggcctc tgagctattc cagaagtagt gaggaggctt   240
ttttggaggc ctaggctttt gcaaaaagct t   271

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<211> 32
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<213> Homo sapiens

<400> 6
gcgctcgagg gatgacagcg atagaacccc gg   32

<210> 7
<211> 31
<212> DNA
<213> Homo sapiens

<400> 7
gcgaagcttc gcgactcccc ggatccgcct c   31

<210> 8
<211> 12
<212> DNA
<213> Homo sapiens

<400> 8
ggggactttc cc   12

<210> 9
<211> 73
<212> DNA
<213> Homo sapiens

<400> 9
gcggcctcga ggggactttc ccggggactt tccggggact ttccgggact ttccatcctg   60
ccatctcaat tag   73

<210> 10
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<212> DNA
<213> Homo sapiens

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caattagtca gcaaccatag tcccgcccct aactccgccc atcccgcccc taactccgcc   120
cagttccgcc cattctccgc cccatggctg actaattttt tttatttatg cagaggccga   180
ggccgcctcg gcctctgagc tattccagaa gtagtgagga ggcttttttg gaggcctagg   240
cttttgcaaa aagctt   256

<210> 11
<211> 558
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (546)
<223> n equals a,t,g, or c

<400> 11
gaattcggca cgagctgggc tgcagttggc gattccgcgc ggtgaaagca gccagtgccc   60
agggtctttt cctgagtgca cctgggcctg ccgcccggcg atgccatggg gtcgtgcgct   120
gcttttctac ttgccgcgct ctcactgctc ggtgtactgg gagggtaccc tgggaggcgt   180
gcctttattc ttccgaaccg ccgctcactg agacagtggc tagaagtgtc tcttggacct   240
gtgagttagc cttaacctgt tatgccccca gagccctcag tggagcgccc gtactttgcc   300
ggcatgacgt ttgatttccc ggtgataatc cgacgagttt gacagattga ggtagtgagc   360
aaagttgccc gtcagttggt ggccacttga cttcgtgcgg accctggcct tgctcttgga   420
agagatagtg ttcttagggc tggtttcact gtctcttaag actgaarggt ggarctggga   480
tatagatgtg ttgtttcttt tcaaatcaaa cctgcttarg tcgtcactcg aagggggggcc   540
cggtanccaa ttcgccct   558

<210> 12
<211> 715
<212> DNA
<213> Homo sapiens

<400> 12
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aaaaatattt actgagtgtg gactctagac cagggcctgt gctaggatac aaagatgaat   120

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gaggcaccac ccttatcttc gagtagtata tgttttattt tattttattt ttttcccctg          180
ctgcctccct tgagtagtac atgttttagt aaggggaaca gacactaaag agtcctggta          240
atgatgagca aagtactgca tgagtaagta tctgggggggc aagtgtcccc actaggactc          300
ctgtcagatc tggaaaaggc ctgaggaatc tgatacatga cttaatgcag cgtatacttg          360
cagcctggaa aactaagtaa tgacaaaata gacattcttg tcagtgtgag ccattctctg          420
agtccmaggg gagtacataa ttcaaaccag aattggtcat tttggagttt gcactcttag          480
cagtatacag tggagtgaaa tttaagaatc aatttaattt cttttcagtt tttatgtaca          540
taaaacctgc ttactacaag agacccagtt tattattttg tgttggttaa cattcataag          600
tatatttcat cataataagg ctccgtgaaa ttagtcattt tatcatttgc caataaagac          660
atatatctga aaataaatgt tcctgaacct gaaaaaaaaa aaaaaaaaaa ctcga              715



<210> 13
<211> 838
<212> DNA
<213> Homo sapiens

<400> 13
gaattcggca cgagccaaaa caaaagaaac ctttggaggc atgtgtcaga acagagaaag           60
tgtcctggtt ttgcttatag aatcaaatat gttctcattc tacctactgt tttcattcta          120
catagtgttt tccttctttta tagttttacg tcctcttcct aggaatgagt ctattaagaa          180
aataggtgtt atcttttagc tttggcattt gactttcagg ataatagagc tatctgctac          240
tgacagaaaa gctttgacaa gtgtttaata ctctgggatt accttcatct tacttttgca          300
atcattatgt gaacattgtc ttccgtccac atctayaggc tagtawgtaa caccgttgac          360
taaatccaaa ctttaggcta gggaaaaagg gtatactttc tgggtttcgg ttgtagatta          420
tgtttagatc taaycaaaac aggacagtgg tccaaacaga aaattgctat tttctgtatc          480
ttgtaaatct aggatttgag ttttttaagat gaatttatgg ttccctttct gatatcattt          540
ctcatctgca gctcctaatg cctggtacct tgggtatgga gtgaggagag acaatggaca          600
gttttatata agaaatggaa gtaatgatac tatctttcct ggaatatttg caggccccag          660
aggagatgat gagcaaggac tgttggcctg tattacacac aacaggttg tagttactat          720
cccagcaagg aaagggtgta tctttcttct ttcatgcaaa ttatctatga tgacctaaca          780
gtttgattat agtgagtgga ctaaccacaa caataaaaaa aaaaaaaaaa aactcgaa           838



<210> 14
<211> 513
<212> DNA
<213> Homo sapiens

<400> 14
ctgcaggaat tcggcacgag ggaacaactc catgttttttg taaaggccta gagaacatat           60
atccagtgcc tttccttttt gcctttgtat tcatcatttt ggcaaattac tggaagatga          120
cggttctggc caaaaggctg gttttgtttt tgggtcacat tttcttgctt ctctgcgtta          180
gaatcttgga ttagatgatg gacatggtga agatctcagc aacctcattc actagaagat          240
catgtggatt ggaatcatac aatggggaac aaatggaaaa gagtactttt gaaatagtgc          300
tggagaccac tgtgaccaca gaatgtcaag cacgtgctg ccattactgt tactatttgg          360
aaaatacatt cttgtaaatg caaccttagg gggtttgagg gggaagtctg ttgggaaatg          420
aattgcaaga aaaatattac accctgaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa          480
aaaaaaaaaa aaaaaaaaaa aaaaaaact cga                                         513



<210> 15
<211> 712
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
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<210> 18
<211> 1219
<212> DNA
<213> Homo sapiens

<400> 18
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ctgtttgaga atgcttctta actaatacta gtacaatatc ttcaataatg tatgtacctt     120
atagaaaatc ttgaacagta caagattttc ataattaagg catgcaaaac tgcttgggct     180
ctttgattcc aggtgtcctc ttctcccttc tgcttttgcc atctatgttc aatataattc     240
taacccagtc taagtatgga gaaaattcct accctgcctg cttttatagc tcatcaaatt     300
tccctgtatc agctatcact tttctggtag gtgtagtctg atttctgtct gtcatgcctt     360
tgccacaatc ctttctttga agagtaggta aaagatctat taaagtgtta atcacattgc     420
tctaatatat aaagcctcca gtggtttccc atatcactct gtaaatgcc ccttgccagc     480
ctctcccatc aacctcgctt tttctgttct tgtatatgca catctcttcc tgagcctta    540
ttgccatcct catgtgggga tgtttctgtc tcagagatag tctttattca ggtcccactc     600
tgcagtcctc tccagagggg ctgctttcac cacccttct aagtaagcct ctctaaacac     660
ctctatcata ttctatccct tagccagcac taattttttc ataatgctta ccactaactg     720
aaatttactt tatcatttaa tctcttcctc attagaatgt aagctcgtaa gggaggggca     780
gctctgtagt ttattcatta ttgtatgtcc ctcacctaat cctatgagtg tctggcccat     840
attagggtat gtaataaata ttacttgagg aatgaatgaa tttaacatac taccaattct     900
ctgagtgact cttttttaaag ccttcatcat cattcacact ttcttgtctt tcatatgggc     960
atgtccaatc acccttccat gaatatctgt acctgttaca aagagaggac taggttcctg    1020
gagttcatag atgtaaacaa catcctaggg ktagcaaact ggtgggccct gagccaaatc    1080
ctggcctgca catgtatttt gtttgakttg tacaatgttt gttataaatg aactggctga    1140
taatattttt taattggaaa tgtttacatt aaaaacctar acttctagct gctcttaaaa    1200
aataaaaata cggctgggc                                                 1219
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<210> 19
<211> 874
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (461)
<223> n equals a,t,g, or c

<400> 19
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ggtcgaccca cgcgtccgag caattgaatc atctgcccaa ggataagctg ctggtgagag      60
cagagttggg atttgaagtc gagttagacc ccagtgatca cagtcttgac gattaaattc     120
ttccagcttt cattttttcac tgagataatg gtagtgatag tactgacctc taatgtgtgc     180
atttgtgggt atgtggtcca ttcagcttta atccccagaa gacaaggctt attccttttc     240
ttattttttgg tcatgtttta tttttccatt gctttttaaca ggattaccaa aggcacactc     300
agtagtcagt aaacacattt ctaggaaagg tgttgtgtca tcatgccaca tattcatact     360
ttcctgggtt ggaaaataga tcatcagtaa aaacatacag gaaaaatgaa tcttgccaat     420
gcaattgtta acctacaacc ataatatacc ttaagtatat ntttgcacat aagtataaca     480
tgcgatttaa aacaataaac cagattgaga tctaaggagc attttgtaag taattactaa     540
tgtttattttt agagagatca cacaacttca aataaaaact gacatagatt gaacaccttg     600
agaataaact ttagtgccaa atggaaaata attttttaca agtaaatttg aagaacaatg     660
tgaactttct ataattatat acagraaata tactgatttg ccaaaatgag taattttgat     720
atattaatat ttcacttata agaatgcata ccacctgatc caggatggga tccaggaaca     780
gaaaagaac attagktaaa aatgacagaa atctgaatat agtatagagt agctaaaaac     840
aaaccaaaaa aaaaaaaaaa aaaaagggc ggcc                                  874
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<210> 20

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<211> 464
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (21)
<223> n equals a,t,g, or c

<400> 20
caaacccttc agtggatgag nccaagtcgc agaaagcatt ctgttgacag atgaacagcc      60
gaaagctggc cagaccctcc tgkatgcact cccwgcccck tktatcagaa acacaggcaa     120
ggaaattgga actgccaccc agcccagcat ggtggctcaa ttggttggtt gcgttgtcag     180
ttgtctcttc gttttgttaa ggttttaat aagtacgttt ggcataatgt cttttaatgg      240
gtttgtaata tttgtaacgg ttttagcagc ctataacttt tcagctggtg cttttactta     300
gggaaaaaaa caatttgtaa atacagaaca ttgtttaaaa gacataacca tagaacatag     360
cttcctgttt gtggattttg tttcctatat attcaaagta aaatgactta caggaaaaaa     420
ataaaaaaaa aaaaaaaaaa aaaaaaatcg gggggggggc ccgg                      464


<210> 21
<211> 637
<212> DNA
<213> Homo sapiens

<400> 21
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ccgctggccm tgctgttcta catgggagca agacagctgc taggtgaagg ggaatgacca     120
ggcagccaca gggaggacat gtggcctcag gaagcctggg tgtgtatcct ggttctgcta     180
ggaacacgtg tggggctttg tgtgggtgac tctctggctc cccaagcctc cctttcctac     240
tgttatatcc ttaaagtgcc tctgaggcca aagcctttgt ggcaattgtc aaatgagtcc     300
atatgcagtg agtaccgtgt tgagggagga caaggtcacc aagagctgag aatgtttctc     360
cgactgatga gacctagata ttgggtacat ggaggtcccc ggtccctttg tgattcctgc     420
agcctgttgc ctccttgcct ggaccccgcc tcagctcaga aagccaattc cctagattcc     480
aaaggccttc ccagaccaat tagcatgtcc tgcagctgtc agctccctgt gcctagcctg     540
gacctcagct catgtctagc acccagtctc ccaaccccac acatattcac aaataaaaga     600
aaataacaaa tgaaaaaaaa aaaaaaaaaa aaaaaat                               637


<210> 22
<211> 752
<212> DNA
<213> Homo sapiens

<400> 22
gaattcggca cgaggggatt acaggcatga gccaccatgc ccggccatat aaagcattta      60
ggatagttag ttgctatttt tatttatta ttattgttgt tgttattata ttactacttt      120
atcccatttc acaaggatgg catgttgcca acattgtctt tctaaagaat atctctgatc     180
acatccttgt tctattaaaa accttttgaa agctccctct tacctttaga agaaattgga     240
acttcatgat tcctcatggt ctggctccag cactgagtct ggaatgctag tgtgagatga     300
ggccttagaa gtcatccagc tgaactcctg gaatttttat agatgaataa atgtagcatc     360
cagacatttt tcytgttgca cccctgtamg ccatgcctc ttccagactc ctggataaga      420
ctgrcagaca tcaccattct cttaaaccag aactacactt gccttcatcc atttgatcac     480
ctggttccag gtaactcatg agctttgtag cttcccttct ctcagacctt ccaaggaaga     540
caatggcata attttcccca tatgctctaa ttagcaacct ttccctgccc ttctgtgggt     600
gggcagggcc ggacacagtg ggtcacacct gcaacctgta atcccagcac tttgggaggc     660
tgaggtgggc agattgcctg agctcaggag ttcaagacag tctgggtaac atggcaaaat     720
cctgtctcaa aaaaaaaaaa aaaaaactc ga                                     752
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<210> 23
<211> 492
<212> DNA
<213> Homo sapiens

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<221> SITE
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<400> 23
aagctggact cgcgcgcttg caggtcgaca ctagtggatc cmaaagaatt cggcacgagc     60
aaggacccag aagtagggtt ttggcctagg taacggggca gagatgtggt tcgagattct    120
ccccggactc tccgtcatgg gcgtgtgctt gttgattcca ggactggcta ctgcgtacat    180
ccacaggttc actaacgggg gcaaggaaaa aagggttgct cattttgggt atcactggag    240
tctgatggaa agagataggc gcatctctgg agttgatcgt tactatgtgt caaagggttt    300
ggagaacatt gattaaggaa gcattttcct gattgatgaa aaaaataact cagttatggc    360
catctacccc tgctagaagg ttacagtgta ttatgtagca tgcaatgtgt tatgtagtgc    420
ttaataaaaa taaaatgaaa aaaawrmaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa    480
aaaaanaaaa aa                                                        492


<210> 24
<211> 532
<212> DNA
<213> Homo sapiens

<400> 24
actcatataa gaaagcagta cgccgcagta ccggtccgaa ttccgggtcg acccacgcgt     60
ccgcccacgc gtccgcacct cccttggctg tggggagggg cttccatgcc ctgtgtggct    120
ctcgggtggg ctgtcgcacc acactgctct tcctttctct tcacgaatca cgcaagcctc    180
ctagtcagtt ctgatgagat aacctggata tcttggttgc cggtgaagga tttacatgct    240
tattatggtt tttttgttgt tgttgttgtt tggttttttt tttgatggga gcctcagatc    300
gccgctgttg ctaatcatcc atcttggccc tgcccccaca tttctgcaaa tttaaatatg    360
agatttgtcc ccttaggtgc acagtccaga ccccatccag tccagctcct tttaaagcca    420
catggaaagt cagctgagaa tggtttggga gcccaggtgc gctgtcttcc gccctgccct    480
ctccctgaaa taaagaacag cttgacagaa aaaaaaaaaa aaaagggcgg cc             532


<210> 25
<211> 920
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (907)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (914)
<223> n equals a,t,g, or c

<220>
<221> SITE
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<222> (920)
<223> n equals a,t,g, or c

<400> 25
gtcggaattc ccgggtcgac ccacgacgtc cgcaaaatta acatcaaaaa ggtatatact          60
ttttaaaaaa aatttacttt tattgatgtg tactcttcct attgatgagt taattccata         120
aatctctact tagtttaact tattggatca aattatcttc agcatgtata tctggggaaa         180
aaaggtccga attttcacat ttatatttaa acttcaattt tttatattta aacttcaatt         240
ttttagcaac agctgaatag ctttgcggag gagtttaata gttacacatt catgctaata         300
tacatttcct ttaaacatcc acaaattctt aaaaagrttg aatcagtaaa tttcatttca         360
gctaaaaatg gagtctaata tattgtttca aaagatacat ttttacccac cataaatgtt         420
acaatatctg aatatgcttt gtcaaactat ccctttatgc aatcgtcttc atattgtttt         480
tatgattcta atcaagctgt atgtagagac tgaatgtgaa gtcaagtctg agcacaaaaa         540
gataatgcac gatgagattg cctaccattt tataggatat ttactatgta tttatacgtt         600
aagacctcta tgaatgaatg tatcagagaa tgtctttgta actaactgtt taattcaatc         660
tgtaataaaa atctaactaa ctaactcatt tatttctatt aaaaaggtat tgtcctttag         720
gcggggaatg ggaatccttg ctgcactgtt gcagtcattc tgaaaggacc tttccctgta         780
cttacctttc aacatgcttc aatcttatca acgctacatt ttgtattttt caaacaagta         840
taaattctgc aataaagaga tgtagttttt ttttaaacaa aaaaaaaaaa aaaaaaaaaa         900
aaaaaanggg gggncccccn                                                     920


<210> 26
<211> 917
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (434)
<223> n equals a,t,g, or c

<400> 26
gaattcggca cgaggtttca ttgccctcaa cattctctgt tcttcaccga atcatgtctg          60
tttcctccaa cctctggcaa acactgatct tgttactgtc tttgtggttt tgcctttttc         120
cagaatgtca tatagttgga atcatacaat tgtgcagact ttttagattg ccttcttttca        180
cttagtaaca tttaagtttc ctccacccct tttcatggct tgatagttca tttcttttaa         240
ttgctcaata ataaatattc cattatctag atagaacggt ttatctacct agtgaaggac         300
atctcaattg cctccaagtt taggcaaata taaacaaagc tgctatcagg atttttcaca         360
gaggaaaaga cagtgggatc caaaactgaa tggtctatca ataaatgacg catggtacat         420
ctacacccat granccattg tgcatccatg agaaaaatcc agatgtagga aggtatgtat         480
aattttgcag aaaagagtat gtaactggaa acaccaarga aaaaggaaa tggatctata         540
tatttaggtg gagatattta tgtggctgca gaagaaatat attattattc atactagata         600
gttaatgttt gcctttggtg ggcaagaaag gtaaaaaggg agaagggagc ccaaccaaaa         660
gaggaagagg aagaaaaaaa aactgcacta agaaaaatct tttaaaagta tgtgatcaca         720
gccaggtgca gtggctgaca aatgtaatcc cagctacttg ggaggctgag gcaggagaat         780
cgcttgaacc caggaggctg aagttgcagt gagctgagat catgccattg cactccagcc         840
tggtgacaga gactctgttt caaaaaaaaa aaaaagtat atgatcacat ctgtgttaac         900
ttacagacta gtctcga                                                       917


<210> 27
<211> 662
<212> DNA
<213> Homo sapiens

<400> 27
gaattcggca cgaggttccc atggcacttt atatgtgtgc atagagagcc agggagcagt          60
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gggggttcagg gtgggcccat gctatgtgct gcagagctgg tgggtcacag tctcccccagg      120
tgatggtggt gttaataatc atcctaggcc cgtggggtgg ggtgaggatt gatgcatgag      180
aaagttgagg cgggggccct ggcatggagc agggctcagg ccgcttgtca cccaggctca      240
tgtcagccct ccggagcctg tgggtgtata ggggaagcgc aggggttctt cagccagagg      300
gacaggttca rggcctgctg atgccccttg ctggttttgg gaccttgagc aagtcccctt      360
gccttttggt gctgtgcctc ggtttcttct tctataagaa ggaggtgatg atgtaaccca      420
cccacccagc ccctctaccc cgcgcatcag ggtagcaggc gagctagcac tgtggcacca      480
ggagtggagc tggcccctgg cgggcccacg ctggagaggc atcgccatct ctgctgcccc      540
cctgtggcgt catcatatca acctgccagt ccccctcacc tggtgttaat ctcccagagg      600
atggggactg rttctgcata ttctttgcta aacaaagacg ctagtttggc tgtggctctc      660
ga                                                                      662
```

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<210> 28
<211> 699
<212> DNA
<213> Homo sapiens

<400> 28
gattcggcac gagaaacttt taaatcttta gttatttctt aatacttaga acacttaaac       60
aaaactttac aaaacaaaag agcagaataa ttagatcctt tcaggagaat atgactttt      120
tttcctaagc acactggacc atagaggaag accaaaggaa tgtacagttg cctgctcctt      180
cctgacttgc tgtatttgac tctgtcccca ctggtggtgg caatgctatt aaccccacac      240
tttaacgtgg caaatcccca gaatctgttg gctggtctct ggctagagaa tgagcacagt      300
ttcacccttta tggctccaga aagagcaaga acacaccact gccagccaga agagagaaaa      360
gtcttgttct gtctctttcc cattgtccca aatagccaag cacaggttca accaccccaa      420
atgccaccct tctgctgtgc agcagccaag gaaaagaccc aggaggagca gctccaagaa      480
cctctgggca gtcagtgccc agatacttgc cccaattctt tgtgtccaag ccacactcag      540
ctgacaaaag ccaacacttt gtctctcttt ttttttttt ctttttttt gagcagagtt      600
tcactcttgt cacccaggct ggagtgcaat ggcaggatct tggctcattg caacctccac      660
ctcccgggtt caagcaattc tcctgtctca gcctctcga                              699
```

```
<210> 29
<211> 1637
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (726)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (727)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (728)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (899)
<223> n equals a,t,g, or c
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<220>
<221> SITE
<222> (901)
<223> n equals a,t,g, or c

<400> 29
aaatgtgcca cgtcttctaa gaagggggag tcctgaactt gtctgaagcc cttgtccgta          60
agccttgaac tacgttctta aatctatgaa gtcgagggac ctttcgctgc ttttgtaggg         120
acttctttcc ttgcttcagc aacatgaggc ttttcttgtg gaacgcggtc ttgactctgt         180
tcgtcacttc tttgattggg gctttgatcc ctgaaccaga agtgaaaatt gaagttctcc         240
agaagccatt catctgccat cgcaagacca aaggarggga tttgatgttg gtccactatg         300
aaggctactt agaaaaggac ggctccttat ttcactccac tcacaaacat aacaatggtc         360
agcccatttg gtttaccctg ggcatcctgg aggctctcaa aggttgggac cagggcttga         420
aaggaatgtg tgtaggagag aagagaaagc tcatcattcc tcctgctctg ggctatggaa         480
aagaaggaaa aggtaaaatt cccccagaaa gtacactgat atttaatatt gatctcctgg         540
agattcgaaa tggaccaaga tcccatgaat cattccaaga aatggatctt aatgatgact         600
ggaaactctc taaagatgag gttaaagcat atttaaagaa ggagtttgaa aaacatggtg         660
cggtggtgaa tgaaagtcat catgatgctt ggtggagga tatttttgat aaagaagatg          720
aagacnnnta tgggtttata tctgccagag aatttacata taaacacgat gagttataga         780
gatacatcta ccctttttaat atagcactca tctttcaaga gagggcagtc atctttaaag        840
aacattttat ttttatacaa tgttctttct tgctttgttt aattattttt atatatttnt         900
nctgactcct atttaaagaa cccttaggt ttctaagtac ccatttcttt ctgataagtt          960
attgggaaga aaaagctaat tggtctttga atagaagact tctggacaat ttttcacttt        1020
cacagatatg aagctttgtt ttactttctc acttataaat ttaaaatgtt gcaactggga        1080
atataccacg acatgagacc aggttatagc acaaattagc accctatatt tctgcttccc        1140
tctattttct ccaagttaga ggtcaacatt tgaaaagcct tttgcaatag cccaaggctt        1200
gctatttca tgttataatg aaatagttta tgtgtaactg gctctgagtc tctgcttgag         1260
gaccagagga aaatggttgt tggacctgac ttgttaatgg ctactgcttt actaaggaga        1320
tgtgcaatgc tgaagttaga aacaaggtta atagccaggc atggtggctc atgcctgtaa        1380
tcccagcact ttgggaggct gaggcgggcg gatcacctga ggttgggagt tcgagaccag        1440
cctgaccaac acggagaaac cctatctcta ctaaaaatac aaaagtagcc gggcgtggtg        1500
atgcgtgcct gtaatcccag ctacccagga aggctgaggc ggcagaatca cttgaacccg        1560
gaggcggagg ttgcggtaag ccgagatcac ctccagcctg gacactctgt ctcgaaaaaa        1620
aaaaaaaaaa aactcga                                                       1637


<210> 30
<211> 2142
<212> DNA
<213> Homo sapiens

<400> 30
aattcggcac agagacgcgg gtccccgggt ctgacaggag cagcctgtgg gcaccgcggc          60
ggtagttgga ggcgggagag ggtccgtagc cgcgccgccc tgccccgcca tgggcctcct         120
gtcggacccg gttcgccggc gcgcgctcgc ccgcctagtg ctgcgcctca acgcgccgtt         180
gtgcgtgctg agctacgtgg cgggcatcgc ctggttcttg gcgctggttt tcccgccgct         240
gacccagcgc acttacatgt cggagaacgc catgggctcc accatggtgg aggagcagtt         300
tgcgggcgga gaccgtgccc gggcttttgc ccgggacttc gccgcccacc gcaagaagtc         360
gggggctctg ccagtggcct ggcttgaacg gacgatgcgg tcagtagggc tggaggtcta         420
cacgcagagt ttctcccgga aactgccctt cccagatgag acccacgagc gctatatggt         480
gtcgggcacc aacgtgtacg gcatcctgcg ggccccgsgt gctgccagca ccgagtcgct         540
tgtgctcacc gtgccctgtg gctctgactc taccaacagc caggctgtgg ggctgctgct         600
ggcactggct gcccacttcc gggggcagat ttattgggcc aaagatatcg tcttcctggt         660
aacagaacat gaccttctgg gcactgaggc ttggcttgaa gcctaccacg atgtcaatgt         720
cactggcatg cagtcgtctc ccctgcaggg ccgagctggg gccattcagg cagccgtggc         780
cctggagctg agcagtgatg tggtcaccag cctcgatgtg ccgtggagg ggcttaacgg          840
gcagctgccc aaccttgacc tgctcaatct cttccagacc ttctgccaga aaggggcct          900
gttgtgcacg cttcagggca agctgcagcc cgaggactgg acatcattgg atggaccgct         960
```

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gcagggcctg cagacactgc tgctcatggt tctgcggcag gcctccggcc gcccccacgg          1020
ctcccatggc ctcttcctgc gctaccgtgt ggaggcccta accctgcgtg gcatcaatag          1080
cttccgccag tacaagtatg acctggtggc agtgggcaag gctttggagg gcatgttccg          1140
caagctcaac cacctcctgg agcgcctgca ccagtccttc ttcctctact tgctccccgg          1200
cctctcccgc ttcgtctcca tcggcctcta catgcccgct gtcggcttct tgctcctggt          1260
ccttggtctc aaggctctgg aactgtggat gcagctgcat gaggctggaa tgggccttga          1320
ggagcccggg ggtgcccctg gccccagtgt accccttccc ccatcacagg gtgtggggct          1380
ggcctcgctc gtggcacctc tgctgatctc acaggccatg ggactggccc tctatgtcct          1440
gccagtgctg ggccaacacg ttgccaccca gcacttccca gtggcagagg ctgaggctgt          1500
ggtgctgaca ctgctggcga tttatgcagc tggcctggcc ctgccccaca atacccaccg          1560
ggtggtaagc acacaggccc cagacagggg ctggatggca ctgaagctgg tagccctgat          1620
ctacctagca ctgcagctgg gctgcatcgc cctcaccaac ttctcactgg gcttcctgct          1680
ggccaccacc atggtgccca ctgctgcgct tgccaagcct catgggcccc ggaccctcta          1740
tgctgccctg ctggtgctga ccagcccggc agccacgctc cttggcagcc tgttcctgtg          1800
gcgggagctg caggaggcgc cactgtcact ggccgagggc tggcagctct tcctggcagc          1860
gctagcccag ggtgtgctgg agcaccacac ctacgcgccc ctgctcttcc cactgctgtc          1920
cctgggcctc taccctgct ggctgctttt ctggaatgtg ctcttctgga agtgagatct          1980
gcctgtccgg gctgggacag agactccca aggaccccat tctgcctcct tctggggaaa          2040
taaatgagtg tctgtttcag carmaaaaaa aaaaaaaaaa aaaaaaaaaa aatgaccctc          2100
gaggggggggc ccgggtaccc aattggccct atgaagaggc ga                           2142
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<210> 31
<211> 1564
<212> DNA
<213> Homo sapiens

<400> 31
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ggcacgagcc ttaggggaac gtggctttcc ctgcagagcc ggtgtctccg cctgcgtccc            60
tgctgcagca accggagctg gagtcggatc ccgaacgcac cctcgccatg gactcggccc           120
tcagcgatcc gcataacggc agtgccgagg caggcggccc caccaacagc actacgcggc           180
cgccttccac gcccgagggc atcgcgctgg cctacggcag cctcctgctc atggcgctgc           240
tgcccatctt cttcggcgcc ctgcgctccg tacgctgcgc ccgcggcaag aatgcttcag           300
acatgcctga acaatcacc agccgggatg ccgcccgctt ccccatcatc gccagctgca           360
cactcttggg gctctacctc tttttcaaaa tattctccca ggagtacatc aacctcctgc           420
tgtccatgta tttcttcgtg ctgggaatcc tggccctgtc ccacaccatc agccccttca           480
tgaataagtt ttttccagcc agctttccaa atcgacagta ccagctgctc ttcacacagg           540
gttctgggga aaacaaggaa gagatcatca attatgaatt tgacaccaag gacctggtgt           600
gcctgggcct gagcagcatc gttggcgtct ggtacctgct gaggaagcac tggattgcca           660
acaacctttt tggcctggcc ttctccctta atggagtaga gctcctgcac ctcaacaatg           720
tcagcactgg ctgcatcctg ctgggcggac tcttcatcta cgatgtcttc tgggtatttg           780
gcaccaatgt gatggtgaca gtggccaagt ccttcgaggc accaataaaa ttggtgtttc           840
cccaggatct gctggagaaa ggcctcgaag caaacaactt tgccatgctg ggacttggag           900
atgtcgtcat tccagggatc ttcattgcct tgctgctgcg ctttgacatc agcttgaaga           960
agaataccca cacctacttc tacaccagct ttgcagccta catyttcggc ctggggcytt          1020
accatcttca tcatgcacat cttcaagcat gctcagttat gaggagtcaa atcctaagga          1080
tccagcggca gtgacagaat ccaaagaggg aacagaggca tcagcatcga aggggctgga          1140
gaagaaagag aaatgatgca gctggtgccc gagcctctca gggccagacc agacagatgg          1200
gggctgggcc cacacaggcg tgcaccggta gagggcacag gaggccaagg gcagctccag          1260
gacagggcag ggggcagcag gatacctcca gccaggcctc tgtggcctct gtttccttct          1320
ccctttcttg gcctcctct gctcctcccc acccctgcag gcaaaagaa accccccagct          1380
tccccctcc ccgggagcca ggtgggaaaa gtgggtgtga tttttagatt ttgtattgtg          1440
gactgatttt gcctcacatt aaaaactcat cccatggcma aaaaaaaaaa aaaaaaaaaa          1500
aaaaaaaaaa aaaaaaaaaa aaacaaaaa aaaaaaaaaa aaaaaaaaaa aaaaggggg          1560
gggg                                                                       1564
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<210> 32

14

<211> 1631
<212> DNA
<213> Homo sapiens

<400> 32
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cttagggga gccctggtgc tacttgcttg aagttttcag tgtaagtacc ctgatgcctt      60
ttggaccttg ggatcagatc aagagttttg gagatcaggt accaaggaaa taaggacagt     120
ctagctgcct caagtgaggg gccctttgca tagctctcct tcccctcac tgaagctggg      180
tagcctattg gggttgagag ggaaaatgtg aaatctcaga atttatctcc cttagaagag     240
agccagtaac ttatgtacaa ggatgaaaga aaggtcgcag cagtagcttt ggggaaaggg     300
aggaagatat ggcacttctc caaccccgga aaacattgct tttgaaaact gctgataaaa     360
tatgagccgg ttattacttc tgtttgggag actgtgctct ctgtggtgcc tctcttggct     420
ctactccaca gataccagac ctcttctaag aggatgagca gaccagcttt gaggttgacc     480
tgtttctctt tgtctgcctt cccaaaacac cagcccccag gaagacatta agcagcctta     540
agcttaaatt cctactccct cttccaaatt tggctcactt gccttagatc caaggcaggg     600
aaaggaaaag aaggggggtc tctggctta ttactcccct aagtctttac tctgacttcc     660
ccaaacccag aaagattttc tccacagtgt tcatttgaaa gaggagtatt ttgtcccatt     720
ttccccttcc tcattatcaa acagccccag tcttccttgt ctctgctaag aaagtagagg     780
catgatgatc tgcctctcaa ctgccctaag tcctagctaa gtatcagggg aaaaaaaaaa     840
aaaaaaagcc taacaaatgg gattagacta gggctgcaag tagtgaggat tttgttgata     900
cctctgctgg gatgtgtgct ttcccatatc ttgccttcag gaattacact gtgccttttc     960
cccagggata tgggctctgt ctacccagtg ctccagtttc ccggtaactg ctcttgaaca    1020
ttgtggacaa gggcaggtct tcatattttt gatcatccct ttctcccagt gaaatcccat    1080
agcccttacc tagagtctag ggcacaaaga cttcggggaa gatacactga gattgacctg    1140
aggagacatc tacacacacc agtggcagct gccccagggc ctgcttcccc ttcctaagtc    1200
tgtcatcctc tggaagggat gggtggtgct ccaatctctg gtgcctaaaa acccaagttt    1260
atttctctct taacactggc aataaccagt ccacaccact gttgcctttt aaaacctctt    1320
aataatctca tgctgtgttt gttttgattc caatccaatt atcaccaggg ctgtgtgggt    1380
aaatgctttt aaatgctctc tcatcttgtt cttcccctc accccccact cttaggtatg    1440
tatgatgcta atcttgtccc taagtaagtt tcttcctgct ccttttgtat cttcctttct    1500
tgtctttcct cctacctttt gtctcttggt gttttgggac ttttttttttt tttttggcc    1560
ttttgtacaa agattagttt caatgtagtc tgtagcctcc tttgtaaacc aattaaaaag    1620
ttttttaata a                                                         1631
```

<210> 33
<211> 978
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (2)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (27)
<223> n equals a,t,g, or c

<400> 33
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angagttgca tgcaagsgta agttggnccc ytsgrggatc tttagagcgg ccgccctttt      60
tttttttttt tgcatgtctg agtttgtgga ataagattca tatttactac aagtaatgga     120
attggagatt cagagggag aaagtcactt atcacattag tgtaattttc tgatggtagg     180
attatggaga gttttaggtt ttccctttt ttccccaact tctctcccct cagtatttta     240
aaaataacat tgtgtgggtt gtttttttt gttttgatt gttttttgtt tttcaaacag     300
gtctcactcc tatccatgta ggctagagtg cagtagtgca atcttggctc actgcagcct     360
cgacttcctg agctcaggtg atcttcccac ctcagtctcc tgagtagctg ggactccagg     420
```

```
tgtgtgccac catgcctggc taaattttttg tatttttatt agatacaggg tctcaccatg      480
ttgcccagac tggtcttgaa ctcctgggcc tgcccaccTc agcctcccaa agtgctagaa      540
ttacaggcat gtgccaccat atccagccta ataacattgt ttttaatgtt cattaagtca      600
tcccaccctc tcagtcttgc agaagcctct caagagggac agaatcagtt gcaaagtacc      660
atttctgacc ctgagacatg gatattattt gttcatttaa atgtcacctg aaaaacccac      720
tcactcaaat ggtctgtgaa gcttgcaaaa acaggaatgc ttaccctcct gggtcctgaa      780
tttttggttc tcttggactc tttgaaattc ttctttctca gaaaggagcc ctctttctat      840
ttcccctcaa agttgtgact tgaccctcac atcccttttct tctccagggc cccttgataa      900
gattctttta aaatttcttt ggagggcatc ccttttagga agacggacgc gtgggtcgac      960
cgggaattcc ggacggta                                                  978
```

<210> 34
<211> 898
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (402)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (452)
<223> n equals a,t,g, or c

<400> 34
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gaattcggca cgagattatg tagtagatgt cactagaatt cttgaaattt gtcttcaagt       60
catggcagta tttcagtatc gctcctttgg gattgcctga gtgatactca agagttagac      120
tagttttatc tgggttcttt gaagaaccgg ggacacctca ctggcttatg ttgaatttct      180
gcactgcagg gaccaactat aaatggtgtt tttggttttt tacgtgttaa gagctttaaa      240
atgtaattct tcctatcatt catgcacaaa tgttctcaca caaattgctt cacagattga      300
taaaactttg aataattttt ccctgaagaa atgttgaact tttctgcaag ctgttggaat      360
kggagcgcgt gttgaaaggc ytgaakggga ccgtactgta cngcctawtt ctttttaaaaa      420
aaattawgat ttcyatttt watycattta cngatgactg aatakgtyca ggccagaaaa      480
tatcccctta tttcaaaatg cagcaatcta taaacaaaat acttgccatt tttctaaatg      540
acacctttt ctataatttg tatagaaaat taagtgcaag ggccaggcac cgtgtaacgc      600
ctgtaatccc agcactttgg gaggccaagg cgggtggatc gcctgaggtc agtagttcaa      660
gaccaccctg gccaacatgg cgaaactcca tctctactaa aaatacaaaa caattagcca      720
ggtgtggtgg cagacgcctg taatcccagc tacttgggag gctgaggcat gagaatcact      780
tgaacccagg aggcagaggt ggcagtgagc tcagatggcg ccattgcact ccagcctggg      840
taacaagagt gaaaactgaa gctgtctcaa aaaaaaaaa aaaaaaaaa aactcgga      898
```

<210> 35
<211> 754
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (311)
<223> n equals a,t,g, or c

<400> 35
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cagcctcatc tcctgttggc cccttgtatg taccctgtgt ttgagttgta atgaacccct       60
gcttgtccat aatctttctt ttaactcctg tgcttctctc tcatcctttg cagagccttc      120
```

```
actttctgct taaagtggac cttgacttct ctttatcttg ctccatttgc acctgaaact      180
tgtcctcaac tgcagtgcta attccttggt aatgttttat aactttgtca ggcagctaga      240
cactgtaagt atagaacatg ctgggaaatc caaattaaaa atgacagttg gcacaaagct      300
gacttctggg nagggaccaa ggaaaagtag ccagagtggc aggatagctg cttccatcac      360
ggattgccag caatgtaaag cgtagactcc agaggaacag tgctaactta aattaactat      420
gcaggcatca gtacttctgg ttctgatggc ccggggattt ctaagtagta gtgagtctca      480
gcattatttg ttatacagtc tactgctaga tgaacaaggc taagtctaca gagaaggtaa      540
attatagaaa ttaggccccg tctctgctaa gaatacaaaa aattagccgg gcgcggtggt      600
ggggtcctgt ggtcccagct actcgggagg tgacgcagga gaatggcgtg aacccgggag      660
gcggagcttg cggtgggccg agatagcgcc actgcagtct ggcctgggcg aaagagcgag      720
actccgtctt aaaaaaaaaa aaaaaaaact cgta                                  754
```

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<210> 36
<211> 699
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (483)
<223> n equals a,t,g, or c

<400> 36
gaattcggca cgagcggcac gagccacctt ctcagtccag tctatgggta tgacagttta       60
tctgctgaaa acccatcctt gcttctttgt tgcctaccag atgcaggtcg cactcataat      120
cctccttccc ggactcagga acagcaagac tgttactatg ccattgtccc ctgccctcct      180
tcccaccctc cttttttttc cctctcccac tcccttcttt cacccctttc tttctgtttt      240
atgctgcttc aagtattaat tttaaaattg ttctacaaga atgcgattta tcagaaggat      300
gtgaaccaag cagaatttct tagtatttct ttgccttagg gcattcccct tgtgtggktt      360
aaaatttgtc ccccattcct ttttgcctgt ggaacttatc cttattcttc aagagactcc      420
tamtcctaat agcactttga atttaacctc cctggtagtt cttctcagcc aaatttcacc      480
ttnctgaaaa caggattctc tgttctccat gtctggctaa ttttgtatt ttttgtggag      540
acaaagtctc actatgttgc ccaggcaggt ctcaaacacc tggccttaag ccatcctccc      600
accttggcct cccaagtgct gggattataa gcatgtgcca ctggacccag ccagagaccc      660
tgtctcttta aaaaaaaaaa aaaaaaaaa aaactcgta                              699
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<210> 37
<211> 971
<212> DNA
<213> Homo sapiens

<400> 37
gccaccgagc cgcagttcct gggtcgcgcg gcagctgtga gcgccgaggg caaggcggtg       60
cagaccgcca tcctgggcgg cgccatgagc gtggtgtcgg cctgcgtgct cctgacccag      120
tgcctcaggg atctggcgca accccgacgg ggcgccaaga tgtcggacca cagggagagg      180
ctgaggaact cggcctgcgc cgtgtctgaa ggctgcaccc tgctatctca ggctttaagg      240
gagaggtctt cgcccaggac tttaccgcca gtgaattcca attctgtgaa ttagcacccc      300
accccatac cccttcttcc acccccagac taaaggaaga tacttactct ctgcccctct      360
ccatttatac caaagaaatc ataggtgaaa cccctaccc tccccaacgt aaatgctcg      420
agaggaatct tccacaaggc agggccatgc acgcaacctg cacacgcact tggagggccc      480
aggtgtctct ccaccagccc ccatgcagta gggactggaa gatatgtcat ctgctggttg      540
tgttatcact cccaccccct accccagccc gtsttccgga atttctcaac taaatttsat      600
tattgggcag gaaggaggtc atgggttcat ttcattttg tttttgtgt ttttaattaa      660
aagaaaggtt acctcagttt tcactcctta gacatggatg tagctacctt ttttgtatg      720
tcttttttt tttaagcaat cgtgttgaat taggagtata cttggtgtgg aaagagtatg      780
aatttgccat gtgatttgca aatggggga agctactgtg agcgtgtgtt tttttaattt      840
```

```
acactataga gtgatttttt tttcccccaa cgtcaagttt ttaccttgca tgtactggag        900
tatttatttc atctattaaa atgttatgtt tctcagaaaa aaaaaaaaaa aaaaaaaaa        960
aaaaaactcg a                                                            971
```

```
<210> 38
<211> 872
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (2)
<223> n equals a,t,g, or c

<400> 38
tngcagttct ccacaccgaa gaggacggtg ggcgccaaca gacaggcgat taatgcggct         60
cttacccagg caaccaggac tacagtatac attgtggaca ttcaggacat agattctgca        120
gctcgggccc gacctcactc ctacctcgat gcctactttg tcttccccaa tgggtcagcc        180
ctgaccyttg atgagctgag tgtgatgatc cggaatgatc aggactcgct gatgcagctg        240
ctgcagctgg ggctggtggt gctgggctcc caggagagcc aggagtcaga cctgtcgaaa        300
cagctcatca gtgtcatcat aggattggga gtggctttgc tgctggtcct tgtgatcatg        360
accatggcct tcgtgtgtgt gcggaagagc tacaaccgga agcttcaagc tatgaaggct        420
gccaaggagg ccaggaagac agcagcaggg gtgatgccct cagccctgc catcccaggg        480
actaacatgt acaacactga gcgagccaac cccatgctga acctccccaa caaagacctg        540
ggcttggagt acctctctcc ctccaatgac ytggactctg tcagcgtcaa ctccctggac        600
gacaactctg tggatgtgga caagaacagt caggaaatca aggagcacag gccaccacac        660
acaccaccag agccagatcc agagcccctg agcgtggtcc tgttaggacg gcaggcaggc        720
gcaagtggac agctggaggg gccatcctac accaacgctg gcctggacac cacggacctg        780
tgacaggggc ccccactctt ctggacccct tgaagaggcc ctaccacacc ctaactgcac        840
ctgtctccct ggagatgaaa atatatgacg ct                                     872
```

```
<210> 39
<211> 608
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (10)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (16)
<223> n equals a,t,g, or c

<400> 39
ccatacgcan accgcntctc cccgcgcgtt ggccgattct tatggcagct ggcacgacag         60
gtttcccgat ggaaagcggg cagtgagcgc aacgcaatta atgtgagtta gctcactcat        120
taggcacccc ggctttacac tttatgcttc cggctcgtat gtkgtgtgga attgtgagcg        180
gataacaatt tcacacagga aacagctatg accatgattt acgccaagct cgaaattaac        240
cctcactaaa gggaacaaaa gctggagctc cacgcggtgg cggccgctct agaactagtg        300
gatcccccgg gctgcaggaa ttcggcacga gtttgggtgg agtttccaag gtgaaagttt        360
ctgaattggt caatcagtga cgcctttgta aagatggctc atgtggtggt cgctcgcaat        420
gaatgcctga taagggcttt tctgtttctt ttgcactgtg taagtttgct cccatcgcct        480
ggggaagtta atatcagaca cacacttttt acggtagaag agaggttgac tactccaagg        540
```

```
gcactgaaac tctcactgag ccttattgtt tctctacacg cgamttgcag aaagcaggag      600
tgctcgta                                                               608
```

<210> 40
<211> 855
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (850)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (851)
<223> n equals a,t,g, or c

<400> 40
```
ctgtaatagc acacaactca gaactcttca gcatttgtgt gattccttac ctctggctga       60
taaaactcta atgggttgtg gcttactttg tttccatttt ctttggcttt gtgcaatttt      120
tgtgtaactt tacttgtacc tatattttct gtttacagtt ctttttaagg ggaggggtag      180
ggttctaaga tcttgttgtt tattgtagat aaaaattttt tcgtgttgta gaaaagcatg      240
ggttatgcgt ttgactgaaa aagacactgt attatttacc aaaggggtat tgtttttgca      300
tttgtttata aatgcattat tttggtactg taaatttgga cataatttct gagtttatta      360
ctactggcat tttctttttc ccttttttttt ttttttaacc gtaagtgcac gatgcaggtg      420
cataggcccc agaccaaact agaccaccag catgttcatg tccagacctc ggcagtggcg      480
tgcactgctt gtgcacctca gttcctccag tgttggtttg tttgttttt aattcagcat       540
cctgctggtt ttactttcca agcaagatct gttgcgactc ccaaatgcgt tttaatgagc      600
tcatccttat ttgcctttct tcttacgtat tttgtgtatt agattgtgca ggagatattc      660
tagaaggcat taatggtttg cattcaaaac gatgtggttt gtccaagtta ttttctgtct      720
ttattactga gacggattaa tctccttatt tttttcttga tgatttgaag ttgtaacagt      780
tgtccagcta ttgcttaata aaattttgca gatcaaaaaa aaaaaaaaa amctcggggg       840
gggcccggn nccca                                                        855
```

<210> 41
<211> 1042
<212> DNA
<213> Homo sapiens

<400> 41
```
acggcccgta attcccgggt cgayccacgc gkccgtgctt cctagaaggt cgtgtcacgt       60
ggaacctctt aatctcagca tccggagctc caggaaggga aaatttcaag tcagatagaa      120
ttctatatat accatttctt tggaaccttc agccctcaag attccaacat catgacctca      180
gtttcaacac agttgtcctt agtcctcatg tcactgcttt tggtgctgcc tgttgtggaa      240
gcagtagaag ccggtgatgc aatcgccctt ttgttaggtg tggttctcag cattacaggc      300
atttgtgcct gcttggggggt atatgcacga aaaagaaatg gacagatgtg actttgaaag      360
gcctactgag tcaaacctca ccctgaaaac ctttgcgctt tagaggctaa acctgagmtt      420
tggtgtgtga aaggttccaa gaatcagtaa ataagggagt ttcacatttt tcattgtttc      480
catgaaatgg caacaaacat acatttataa attgaaaaaa aaatgttttc tttacaacaa      540
ataatgcaca gaaaaatgca gcctataatt tgctagttag gtagtcaaag aagtaagatg      600
gctgaaattt acataagtaa tatttcataa tcttagaatt ctctcaaagc atgtgaaata      660
ggaagaagga agttcttgcc cagaatctta ggaaatcacc actgttcggt tataatcact      720
gcctcctgaa tcgttgagga gtcttttaaa ttagattttt gttttgttgt ctcccaagtt      780
aatattatat ttagatatca gagagtcagg yaaaaaggaa aacttttatc tctagggaaa      840
aaacatttag aaaaatgtat tcagtgtatc taatactgaa atgcggaaaa aaatttaatg      900
```

```
ttaaaaaaaa actatagaca ttgacatgga aaagagattt aatgttttga aaaaaaactt      960
tatattaact gagtaacatc ctcctgatga gaagtactat attaaatata aacccattat     1020
gttataagtt aaaaaaaaaa tt                                              1042
```

```
<210> 42
<211> 702
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (515)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (614)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (673)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (677)
<223> n equals a,t,g, or c

<400> 42
gggacaatga actccttctg gtctaagtta ttggtgctgc ccctgctggc tccgctgtcc       60
atggcccgag cctctgcctg tcagagatgg tagagccacc aggacatgga gtcattgctg      120
acacagggaa acatgagatg tcttaggttt ggtgtatgtg aaacatgcat gagaaataga      180
ggccaaaagt tccactgtgg agcgcagaca gaatggtctg aatgctcttg cagttactac      240
gtcagtagtt tgtcatctaa tatatattat acatctataa cctatgtatt taccttattg      300
tgataatact gttttgtttt gttttttttc taattttgct ttgtgcaaag ccaaatccct      360
ttcagcagca ttgagctaaa aaaaaaaaaa agtgcatgtt tagggctggg cacggtggct      420
catgcctata atctcagtac ttcgggaggc cgaggcaggc ggatcacaag gtcaggagtt      480
cgagaccagc ctggccaata tggtgaaatc acgtntctac taaaaataca aaaattagct      540
gggcatggtg gtgggtgcct atagtcccag ctatgcggga ggctgaggca ggaaaaaccg      600
cttgaaccct ggangcggaa attcccagtt gagccaagat cgcgccactg cactcccagc      660
ctggttgaca gancganact cttgtctcca acaaccagca ac                        702
```

```
<210> 43
<211> 642
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (593)
<223> n equals a,t,g, or c

<400> 43
aattcggcac gagcggcggg gtcgactgac ggtaacgggg cagagaggct gttcgcagag       60
ctgcggaaga tgaatgccag aggacttgga tctgagctaa aggacagtat tccagttact      120
```

```
gaactttcag caagtggacc ttttgaaagt catgatcttc ttcggaaagg tttttcttgt      180
gtgaaaaatg aactttgcc  tagtcatccc cttgaattat cagaaaaaaa tttccagctc      240
aaccaagata aaatgaattt ttccacactg agaaacattc agggtctatt tgctccgcta      300
aaattacaga tggaattcaa ggcagtgcag caggttcagc gtcttccatt tctttcaagc      360
tcaaatcttt cactggatgt tttgagggggt aatgatgaga ctattggatt tgaggatatt     420
cttaatgatc catcacaaag cgaagtcatg ggagagccac acttgatggt ggaatataaa      480
cttggtttac tgtaatagtg tgctgttcat ggaaaccgag ggctgcatct tgtttatagt      540
catctttgta ctgtaatttg atgtacacaa cattaaaagt actgacacct ganaaaaaaa      600
aaaaaaaaaa aaaaaaaaaa aaagcggccg ccgaattaag cc                        642
```


<210> 44
<211> 1219
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (25)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (26)
<223> n equals a,t,g, or c

<400> 44
```
aattcccggg tcgacccacg cgtcnnctaa aatccccaaa ctgacaggta aatgtagccc       60
tcagagctca gcccaaggca gaatctaaat cacactattt tcgagatcat gtataaaaag      120
aaaaaaaaga agtcatgctg tgtggccaat tataattttt ttcaaagact ttgtcacaaa      180
actgtctata ttagacattt tggagggacc aggaaatgta agacaccaaa tcctccakct      240
cttcagtgtg cctgatgtca cctcatgatt tgctgttact tttttaactc ctgcgccaag      300
gacagtgggt tctgtgtcca cctttgtgct ttgcgaggcc gagcccaggc atctgctcgc      360
ctgccacggc tgaccagaga aggtgcttca ggagctctgc cttagacgac gtgttacagt      420
atgaacacac agcagaggca ccctcgtatg ttttgaaagt tgccttctga aagggcacag      480
ttttaaggaa aagaaaaga atgtaaaact atactgaccc gttttcagtt ttaaagggtc       540
gtgagaaact ggctggtcca atgggattta cagcaacatt ttccattgct gaagtgaggt      600
agcagctctc ttctgtcagc tgaatgttaa ggatggggaa aaagaatgcc tttaagtttg      660
ctcttaatcg tatggaagct tgagctatgt gttggaagtg ccctggtttt aatccataca      720
caaagacggt acataatcct acaggtttaa atgtacataa aaatatagtt tggaattctt      780
tgctctactg tttacattgc agattgctat aatttcaagg agtgagatta taaataaaat      840
gatgcacttt aggatgtttc ctatttttga aatctgaaca tgaatcattc acatgaccaa      900
aaattgtgtt tttttaaaaa tacatgtcta gtctgtcctt taatagctct cttaaataag      960
ctatgatatt aatcagatca ttaccagtta gctttaaag cacatttgtt taagactatg      1020
tttttggaaa aatacgctac agaattttt tttaagctac aaataaatga gatgctacta      1080
attgttttgg aatctgttgt ttctgccaaa ggtaaattaa ctaaagattt attcaggaat      1140
ccccatttga atttgtatga ttcaataaaa gaaaacacca agtaagttat ataaataaa       1200
aaaaaaaaaa aaactcga                                                    1219
```


<210> 45
<211> 437
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (422)

<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (423)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (427)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (437)
<223> n equals a,t,g, or c

<400> 45
```
gaattcggca cgagggcggc accagggagc ctgggcgccc ggggctccgc cgcgacccca        60
tcgggtagac cacagaagct ccgggaccct tccggcacct ctggacagcc caggatgctg       120
ttggccaccc tcctcctcct cctccttgga ggcgctctgg cccatccaga ccggattatt       180
tttccaaatc atgcttgtga ggacccccca gcagtgctct tagaagtgca gggcacctta       240
cagaggcccc tggtccggga cagccgcacc tcccctgcca actgcacctg gctcacaaaa       300
agagtgcaac aaatgcttct attccatagc tacggcattg ctcagtaagt tgaggtcaaa       360
aataaaggaa tcatacatct caaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa       420
annaaanaaa aaaaaan                                                       437
```

<210> 46
<211> 533
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (305)
<223> n equals a,t,g, or c

<400> 46
```
gaattcggca cgaggaccct atcttacaaa aaagaagaag aagaagaaaa ccatgacagg        60
tgtctttaag ctgcccttgc tgttctgggt tcatgaagca tctgtgggag gttgcccata       120
tgtaaaatta gttgagtttg aagaaatgtt aacgttatat ggtattcttt taattttgtt       180
ttaaaaataa tttttctcat tcaaatcctg aattagaagt tgtttggtat aaatattgaa       240
aattgttgag gggagaattt attcaaagtt taatcatttg ctttatctat gttatactta       300
gctantagtt actggaagtg tcaagtttta tttttagatc ttaactagag tctaaagtaa       360
ttactaaaag ctagttttca aataatatgt aagagtaaag tcctgagtta aaagatttag       420
catactgaat taacttagtt gactgatgct gtacttacat gggcctccta tttcttgtgg       480
ccaagatagc atcaacagaa aaaaamaaa aaaaaactcg aggggggcc cgg               533
```

<210> 47
<211> 1849
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (222)

```
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1300)
<223> n equals a,t,g, or c

<400> 47
gtttttaaaa aattaaacaa ggctttgtgt tcctagaaga gcttcatttc agtgaatctg      60
gtgacctcca tctgcttgct gtcataaccc gacacggact tattttgtc attagcaagg       120
gggaaaaggc caaaggacaa gggcctcttc tcccattggt tttcctgtgg gcagaagggc      180
tgaggaagat ggcccagccc gtgggggctg ctgggtcacc ancagygggt agggtgcaat      240
ctggtgtgtg ttccagcagt gagacggtgt tattgtgaag gtggcattca tctgcggacc      300
aaaacccagc catcggggaa gggtcagggc ttctgtggaa cttggaacgt gccaggacca      360
cctgcaaaag ccagggtgcg ttgatcattc tcagatcatt gattggcctc cacttgggta      420
tgtgaattat tcatgtccca gaagaccaaa aagtgctctg gttctgagat gagtatttta      480
ttcgtgttct gtttccgaaa cacttagcaa agaaggtcac agtgatgtgg agtcgccgca      540
cccatctttg aagatagcca gtgtccctgg atgaggtgat gatttcccgt cccaaggact      600
ctgtgaagtt tagagtacag tttgttgggg tccaaaagac accatctcta ccccacccaa      660
ataaaaatgc actcatctct gtagaacatc tgctgtcaaa ggccagcctg tcgttagggc      720
atggcttatg cttgacaaac cagtaacaac tgtgggatgg cgatggtggg atgtgtcgca      780
agcaattcac tagacaatct tcacatgaat gtcggtagcc agggtctctc ccgagggatg      840
gctttagtct tgatgaatgt gaaccatgtc ggaattgtta ggtagaaacc tgggctggga      900
ggcctcggac cccaggctcc atccctggct tccccagcct gcggccgcaa gcaaaccaa       960
gcgcgagatg cagctagcac ccttcatatc catccccgtt ctcagcggga caacaccatg     1020
gacagccgtt ttcagagcct ccagcatttg cacaccacta ctcaccctct ctgctgctgg     1080
catgttggta gagtcatccc tgtaatcaag aaatggcctg tggaatgtta ttgttcaacg     1140
ttgtttacag ctcttaaaac atggtgagga atgcctaagt cttagtgacc aaacgtgacc     1200
ttgaaagcag acatagcatg acagaccttc ctagagtgtt tggtcgggtt cacagtgacc     1260
gagagtcagg tccagcacac acctgggaaa gggatgctgn cccaaggggg accaaaaggg     1320
ccggacgtta cagggtgaaa ccctctgacc cctcgcgaca ccgtaggact tgactttgt      1380
ttagtctttc taagaaatag atcatggagc caagtgaagt gcactttgtc aaatgtaagg     1440
gtctgctttg ttcttgttgc ttttctgttt tttaaccttt tgttccgcca tttaaaaaaa     1500
gaaaaaaaaa aagcttatgt ttcttgtcaa atgcagaaat gttccttccg ccactcactg     1560
aagttttgca ttctggcttg tgcagttttt attgtctgtg tcagacgtac agccagacat     1620
gttctctatt ggcatttttc cgattctgtt cagatgacag cgaccgcctt ttcattcccc     1680
ccgccacctg tactcaccct cacgctcttt gaagaaaaaa aaaaaaatca ccttgtgtgt     1740
tgtagctcat ttgtttcaag agagaatcaa cagatcatat tcagtgtctt gaataaattg     1800
ctctattttg atattagaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaa                    1849


<210> 48
<211> 926
<212> DNA
<213> Homo sapiens

<400> 48
ctcaaccaca actagaattt gcacaatata agcttgaaac gaaattcaaa agtggtttaa       60
atgggagcat cttggctgag aggaaagaac ccctccgatg cctaataaag ttctctagcc      120
cacatcttct ggaagcattg aaatccttag caccagcggg tattgcagat gctccacttt      180
ctccactgct cacttgcata cccaacaaga gaatgaatta ttttaaaatt agagataaat      240
aagacgtgcg tggtttctta agcacagctc ctccttcttg atattgcaca tgcacttcag      300
ttcatggcta gctgtatagc ttccgtctgt aaacttgtat tttcaagaat ccttggtatt      360
gaattttag aaatgctcac ataattgttg ggactgattc attcctccac gatatgcctc       420
ctctctctga tatcctgcta actgtagccg ttgtggcatt tgagatgaca ggacatatat      480
atatatggcc ccacacttga ccttgagtgc ctgaatgctc tgaaatcaag catatggcac      540
agcgctcaag acttttgggt ttgtgtcctt ttttctatgg ctgtctcttc tcaattctgg      600
agaggtctgg ttccagtggc tggtttcyar ggattgattc ttaagctctg gatcacagag      660
```

```
agaagcaaca aggaactata ctcaactcaa aacttttag gagaatcatg aaattggtct      720
attcaaagga tggagttgag tccatwmtgt tattgttgca agaggttgca tatttggtga      780
gtcagttata taaaatagtg ttcttattgt aaatatgata cttctcataa tctattttat      840
catgtgtata acattcaaac tgacaaatat attgacttat gaataaaggt gtcaaaaaac      900
aaaaaaaaaa aaaaaaaaa ctcgta                                           926
```


```
<210> 49
<211> 1593
<212> DNA
<213> Homo sapiens

<400> 49
gcggacgcgt gggctgtgct ccctgcagtc aggactctgg gaccgcaggg gctcccggac       60
cctgactctg cagccgaacc ggcacggttt cgtggggacc caggcttgca aagtgacggt      120
cattttctct ttctttctcc ctcttgagtc cttctgagat gatggctctg ggcgcagcgg      180
gagctacccg ggtctttgtc gcgatggtag cggcggctct cggcggccac cctctgctgg      240
gagtgagcgc caccttgaac tcggttctca attccaacgc tatcaagaac ctgcccccac      300
cgctgggcgg cgctgcgggg cacccaggct ctgcagtcag cgccgcgccg ggaatcctgt      360
acccgggcgg gaataagtac cagaccattg acaactacca gccgtacccg tgcgcagagg      420
acgaggagtg cggcactgat gagtactgcg ctagtcccac ccgcggaggg gacgcaggcg      480
tgcaaatctg tctcgcctgc aggaagcgcc gaaaacgctg catgcktcam gctatgtgct      540
gccccgggaa ttactgcaaa aatggaatat gtgtgtcttc tgatcaaaat catttccgag      600
gagaaattga ggaaaccatc actgaaagct ttggtaatga tcatagcacc ttggatgggt      660
attccagaag aaccaccttg tcttcaaaaa tgtatcacac caaaggacaa gaaggttctg      720
tttgtctccg gtcatcagac tgtgcctcag gattgtgttg tgctagacac ttctggtcca      780
agatctgtaa acctgtcctg aaagaaggtc aagtgtgtac caagcatagg agaaaaggct      840
ctcatggact agaaatattc cagcgttgtt actgtggaga aggtctgtct tgccggatac      900
agaaagatca ccatcaagcc agtaattctt ctaggcttca cacttgtcag agacactaaa      960
ccagctatcc aaatgcagtg aactccttt atataataga tgctatgaaa accttttatg     1020
accttcatca actcaatcct aaggatatac aagttctgtg gtttcagtta agcattccaa     1080
taacaccttc caaaaacctg gagtgtaaga gctttgtttc tttatggaac tcccctgtga     1140
ttgcagtaaa ttactgtatt gtaaattctc agtgtggcac ttacctgtaa atgcaatgaa     1200
acttttaatt attttttctaa aggtgctgca ctgcctattt ttcctcttgt tatgtaaatt     1260
tttgtacaca ttgattgtta tcttgactga caaatattct atattgaact gaagtaaatc     1320
atttcagctt atagttctta aaagcataac cctttacccc atttaattct agagtctaga     1380
acgcaaggat ctcttggaat gacaaatgat aggtacctaa aatgtaacat gaaaatacta     1440
gcttattttc tgaaatgtac tatcttaatg cttaaattat atttcccttt aggctgtgat     1500
agtttttgaa ataaaattta acatttaata tcaaaaaaaa aaaaaaaaaa aaaaaaaaaa     1560
ctcgaggtcg acggtatcga taagcttgat atc                                   1593
```


```
<210> 50
<211> 978
<212> DNA
<213> Homo sapiens

<400> 50
gaattcggca cgagatgagt ttggccacgt gatgcaccag ctctgctccc aggtgggtgc       60
gggcccgggc aggggcaggg gcaggggcag gggcagggggc tgcctgtggt cagcgaggcc      120
caagcctggg gcttcggctt ccggctctct ctgcacccgt ccggtggctc cttcatccaa      180
tgccacccaa agatggtgac tccctgtcat gcccgtgtcc tggggctgcc ccagcaaaac      240
accacagacc agggcttaca caaggtgcgt gtatttcctc atggtcctag aggctggagt      300
cggaggtcac agtgtcagca gggttggctc cctcgargtc cctccttggc ttgtggccgc      360
caacaacttc ccgcatctca tgtggtcgtc cttctgtgtg ggtccccaty tygtcttctt      420
acrggacccc agtctgccgg atccgggccc gcccaacaac ctcacttgac ctagtgacct      480
ccttagacat ctgtctctaa gtagtcacat ctgggattac ggcgtgagcc atgttcccgc      540
ggaatttctt ttttatagta ttggataaag tttggtgttt ttacagagga gaagcaatgg      600
```

```
gtcttagctc tttctctatt atgttatcat cctccctttt ttgtacaata tgttgtttac     660
ctgaaaggaa ggtttctatt cgttggttgt ggacctggac aaagtccaag tctgtggaac     720
ttaaaacctt gaaggtctgt cataggactc tggacaatct cacaccttag ctattcccag     780
ggaaccccag ggggcaactg acattgctcc aagatgttct cctgatgtag cttgagatat     840
aaaggaaagg ccctgcacag gtggctgttt cttgtctgtt atgtcagagg aacagtcctg     900
ttcagaaagg ggctcttctg agcagaaatg gctaataaac tttgtgctga tctggaaaaa     960
aaaaaaaaaa aaactcga                                                    978
```

<210> 51
<211> 433
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (424)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (430)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (431)
<223> n equals a,t,g, or c

<400> 51
```
cggccgctct agaactagtg gatccccgg gctgcaggaa ttcggcacga ggcgggaagg      60
cttattccaa ggtaagaggg gctgtgtgaa ggggcagtgg gatggaatgg ggggtggcat     120
gggacaggca caagggaagc ctccagcccc ttttctgcca caagcaagag gcactcagcc     180
ctacctgaga tgtgttattt tttagaaata tctttattga tggtctttgc actcaatata     240
aaggcagcat atggttgttg caatataaat ggtacagaag tccacagagc aaaagggcca     300
gtttctgtcc cctttcctct ctccaggcct ctttctggga ccccattatt ggatagatta     360
agacctttcc agaccttgta aaaaaaaaaa aaaaaaactc gggggggggsc ccggaaacca     420
attngccccn naa                                                        433
```

<210> 52
<211> 861
<212> DNA
<213> Homo sapiens

<400> 52
```
gaattcggca cgagcctgag tcaacttgat atccaagctt tttacttcaa ttatctggca     60
agattacata gactgtcaaa gtttgtgaaa gtttagcaag aaaactgtct tactcacaga    120
accacaggac taactgactg aaccacactc caccatttgc ccctatttcc aggcgttatg    180
gtcaccctgt agtttctaat ctgtatagat gtgtagagca tgcctcttcc ctcttccttt    240
cccctccctg ttttcctttc ctcttgccct ttcttaatgt ctgtytctat tggcttcttg    300
atcttggtct ttaatgttca tccttaagct tgcttctctc ttcagactac tgattcagcc    360
tcttgcattt tctttcaact tgggccaaaa aaacaggcaa cattttcttc ctccactacc    420
tcatcatcat ccaatttatt cctttagttt atattaccac aactctccta aacgtcccaa    480
gtctattatt aagtctaaca acttagcttc gaacctcaat ccaagcatct gacaacacac    540
tgaaatgtgc aagcaagagt cccwatggcc gggtgcagtg gctcatgcct gtaatcccag    600
cactttggga ggccaaggtg ggatcacctg aggtcgggag ttcgggacca gcctggccag    660
tatggtgaag ccatgtctmw actaaaaata caaaattagc cggacattgt ggtgcacgtc    720
```

```
tgtcatccca gcaaggcagg cgaatcgctt gaacccggga ggcggaggtt gcggtgagcc          780
gggatcgtgc cattgcactc cagcctggtc aacagagcga gactccgcct cattaaaaaa          840
aaaaaaaaaa aaaactcgta g                                                     861


<210> 53
<211> 510
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (380)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (396)
<223> n equals a,t,g, or c

<400> 53
gatccccgg gctgcaggaa ttccgcacga gtgaaaaccg cctccaccaa cacccccgtt          60
tgcctacacc acccccctttt tacttagtat gtttatttttt tgtgtgtctc ttgccttcct       120
cccacgtttt atttcccctc agagctgtga atgggcaggt ctgtctctgg tttggcatca         180
ctgagttttt cccatgcatt ggccccaggg ctgctaggat gtgagacaaa tctccctaca         240
atgggcttgc tcccattgtc tgtacagttt aatagatgct ggcatgtcgg aggttaccca         300
tgagtcaaaa tccgctctcc atgcttactc ttgacacccc attgaagcca ctcattgtgt         360
gtgcgtctgg gtgtgaagtn ccagctccgt gtggtncctg tgcttgtact gycccgtgctt         420
tgcagttcct ttgcacttac tcatcgagtg ctgttttgaa atgctgacat tatataaacg         480
taaaagaaaa aaaaaaaaaa aaaactcgta                                          510


<210> 54
<211> 309
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (301)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (305)
<223> n equals a,t,g, or c

<400> 54
gaattccccg ggataaattt catttcccaa agatgagtag gtatgaaaaa taatactcag         60
aagagattgt tcttgtgggg agaactgctt ctacaggatc tagctttgat tttgtatctt         120
tcaatctttt taaaatcaac tttaacgaat ttaaacctat tttaagtgta caagtaataa         180
gtttgacaat tgtatgtgac ttctaccaca ataaaatata gaacattttt atcattctat         240
aaaaaaaaaa aaaaaaaaac tcgaggggggg gcccggtacc caattcgccc tatagtgagt        300
ngtancgtc                                                                 309


<210> 55
<211> 1585
```

```
<212> DNA
<213> Homo sapiens

<400> 55
ggaatttctt aaatatgttc atgtataata cttgatcaaa atatttttgg gttttttgtt          60
ttgttttaat gggttagaaa atgtttacaa tcttggtctt atatgatcac caatggaata         120
gtaacttcca ggtttatatc aatatgagct gactttaact gagttgtttg ggatagggaa         180
gaagcagtcc ctctacagta tacaactact gcttgccagc tggatcaaaa taatcatgtt         240
ttatgaaaat atctccctta agcagtgtta aggttggttt gcagtgtgta agtggcacat         300
tgaactggaa gttttcttga aagctgcttc atctattaag aagcaatttt caaattgtag         360
cgaattatat tatcccctct tttaaagaaa cagtcgttat atgctgatgt ttcttaaaat         420
aactaaaatg tkcctcttaa tgtgatttta aatggagtta tttgtaggtc ctttcttagt         480
agtaaagaat cttctagagg gaaacatttg tgcttttagg gataatcttc cttgtgcctc         540
actacatccc taagtgggta tgactcttgt tattaccaca tgctttttta gtatatttca         600
caaatttact tttaaatatt attttagata cggtgtaaca tgtgcaattc agaataattt         660
tataacaggt catgaaaaac ataactttag ttaggattca caatatttgt wctccacata         720
atgagagaat gaatgagcct ttggagatac tgatataagg caattatttt ttgcaatgtt         780
gaatgtgttt tttagtttga ttcttttttt ttcccccaat agggcactac ctgccatatc         840
atcttgtatt acttttttgat gtaaagcgac taatatttac actatgccat attttttttta        900
attatagttg taaattatga aagatccttg aattttctac agatctacaa ctactaatgt         960
aacagacaag ggcaatcttg gtatttaaat ctgagcatgg cagttctacc ataaaaagta        1020
ctctattttt ctaatttcta ggatttttaa aataacattt ctgtaagtct gacatactaa        1080
tagtcactca agcagtacca tttattttag tttgcatata ttttcactgt ttttaattta        1140
atgtattgag tctaatagga ctgttttgca ataattrgaa taaagattta tttcttctaa        1200
tcaaagatgc ataacagcta ttatctaggg gaccmccaaa tgtgatttca aaattttgtt        1260
aactattaca aatgtaatcc ttatatagaa attttaattt tgtaaagtag tgtataatat        1320
tgtaatatta aattcttgtt cttaaattca aatatgtatt gatcttcaat gtgctgtgtt        1380
aaatcttgct tctctgaaaa gttggagaca agatttgtct tccttttac agtttgtaat         1440
tttcactgtt ttattcctgt taaaaaaaaa aaaagtcat ttgtaaccca tgcagaccat         1500
tgtttgatct atgctaactt atcaacttgg ctattcaata aagttaattg aaaagaaaaa        1560
aaaaaaaaaa aaaaaaaaaa ctcga                                             1585


<210> 56
<211> 874
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (468)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (501)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (546)
<223> n equals a,t,g, or c

<400> 56
agggggaatct cggtgctgcg acgagtgtgg ggccagccgt ggaggctcca ggtgttctct         60
ctgccccagc agagcccggc aggagcccca acaggaagcc agcgcggcat ggctgccacc        120
gacttcgtgc aggagatgcg cgccgtgggc gagaggctgc tgctcaagct gcagagactg        180
cccccaggctg agcccgtgga gatcgtggcc ttctcagtca tcatcctttt cacagctact        240
```

```
gttctgctgt tgctgctgat agcctgcagc tgctgctgca ctcactgctg ctgccctgag      300
cggagaggca ggaaggtcca ggtgcagccg acaccaccat gacggacggg cgatggctga      360
ggagaagctg gagaggagat ggccaatgcc atgacacagg ccatcagcct ggccctgcag      420
cccttacccc tcaagaccag gctcccctgg ccccagctct ggcccagncc caggtacctg      480
gacactgaca acttgagccc ntaccaagga aacaagggct ggtataggtg caaacctctc      540
atctgnccag tggacactgg gtgctgggga gtcagctgtt tcaaagactg ggtcaactgc      600
ctgggcttct tcgcctacct gcacttttta acaaaacaag gaagtagggg tccccatacc      660
ttgatggaga acagtcccca cctgtgggca attggcccctt ggggctctgc tgatacatgc      720
caaagaggag caaggcaatc agaggggctt tgtgcaatag cttctgcatc cgagctcccg      780
ccagagcgtg agcatgtcag tattctagtc cagtatttgc cagtttccaa gtaaaagctt      840
ttgtgttaaa aaaaaaaaa aaaaaaaact cgta                                   874
```

<210> 57
<211> 1169
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (2)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (9)
<223> n equals a,t,g, or c

<400> 57
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gngcggccnc cctttttttt tttttttata ttttatcaat tttattgaaa tattccaagg      60
atcccaaccc catttaaaaa taaaaattgt aaagcactcc attcaataaa agcacataag     120
tccccctcaa taattagtat gacaattcac gatacagctc ttactctggg agagtttatt     180
ttacccttta ttccaaaagg cacaaagtca tctgaggcct cagatattaa ccccactgca     240
tgttaatgac acaccactga ggtgcagctc aatgtaatta ttaaagctta taacacactt     300
ccccaagaat ttatagattc tttctataaa taataattta aaaaatactg caccttaaga     360
ccaatacagg cttaacaaaa gacctgaaat ttctgcaagg gcagttttgt ttcttgatag     420
aagtacaact tttgaaagtc tattcccagc aaaagaaaca ctagacccag cttggccaaa     480
gaaacaaaat aaaacaagtg atttctaaca cgctaaaaga gtacattttc atcagctcca     540
aagaaagcag tcctggtcat tcagaaggct cctatgatcc caccagtctg cagtcattag     600
aaatatatgc tttacaggcc acaggctgct ctggatttgg tttcagacac cagtgaccag     660
aagaagccag ttttgcgtgt gagggggtgtg ggccccgct gccttgggcc tgctcaccgg     720
ggtggatgga cccccgccgg tcacagcct gctgtcacgt ctggactgtt ggcctcttct     780
gcatctgggc tgttgggctc tcctgctctc tgtccctcag tcacgtcatt gtctggctgt     840
ccggtgctgg ctgcactctc atttgtgagg ataacccctt ccttcttctt ttctcccaat     900
acctccagcc ccatcatcct gagataatga agccgttcat tcttgggcac aaaagttcga     960
atggaggcct ttccccgcca tccgcataag acgatgggac actgcagagc gtctggattc    1020
gcagaatctg gttcatactt cagcacgatg cttccctttg ccaggtcctt tgcttgactg    1080
taggtctcac tgctgagttt tctaaaaaag ggattttcct gggtcaacag tatcttaaca    1140
tcttccattg atacagtaat aattctttg                                      1169
```

<210> 58
<211> 1066
<212> DNA
<213> Homo sapiens

<400> 58
```
gaattcggca cgagcaaatg ttgaaccaat tatgttttgg tggtggtgtt cttagctgtt       60
```

```
gaatcctgaa tggtttataa agtgaactag ctggcttaat gcagccagcg ttctgggcag       120
cagaacatat tcattcttac tgtaaattct atttgctgct tccaaaggtg atgattttca       180
agcagacatg ttctatatgg tctgtgtttt aggatctggt gcccagcctc tatcagagct       240
tgcctacctg gcaaagctgc ctacccttca agtgggaaaa tataatccac tgtttaacaa       300
ggctcaccct ctccaccctg tcctaacgac cttttgtgaa tgtgctgtga tattttcttg       360
ctcaatagca aggtggtagc tctgctttca tttaagaaa gtggaggctg agggcattgt        420
atcaatactg ttgcaactcc agaagtttt ccttgtaaaa ttaaaggaaa gatcttgtta        480
ttgattaacc attttcttat gccttgctat tgacatattc atgctctttc tacgtctagt       540
ggctgaaaat gtttgcattt gttcatttga ctaatggtgt gatttttgky ycwatattat       600
tagacctgta atgttttaaa atgtatttta ttaaatttgg actggatgta tgkcctctag       660
caatacgagg tactttctaa actattaagg gagggggttgt aycctcatgt tgagataaga      720
tgatggtcgt ttaaatttg caatttttttt tggcctgcag ggatatttttg tgtttatgtg      780
tccaaaaaag gaataaattg gcattcttgt gccaaagtt gttttttcctg tcaattgtct       840
aataagtatg cagtacactg taatggcaac atacatggtt gctttataaa aacagtttcc       900
tcagtatgag aaattttaca aagaacagtg gaaaaacttt gtgttttttaa ctcttgggtc      960
tccctattttt taaaaattgc tatttggtat acaattatta tgtgtcaatt aaaactaaaa     1020
taaaacttttt aaaaaaraaa aaaaaaaaaa aaaaaaaaaa ctcgta                    1066
```

<210> 59
<211> 772
<212> DNA
<213> Homo sapiens

<400> 59
```
gaattcggca cgagctttcc tgagcctcag tttctccaac ggtgggaggt ggtagaaatt        60
gatatagtac ttaccactga gggtaaaatg agatataacc tgtgtaaata ctgtacacca       120
cagtcattca atagtggcag cttaaaaaaa ttattctacg attacccttg cttcagtgat       180
tcttcttggt gttattgaag ggtgagatct cggtggggat ctcccaggtg tttccataat       240
cccagcgatc accccaggga gaacctctct ccttaggctg ctagaggaca tgtgccatag       300
gaccagatag gagggagggg cagcggtggg aatgcgtttt cagagctacc tttggccaag       360
ccgtatcctt gtggggacct attgcattgc tgctgaagtg ctgttccat cagccctggc        420
ttcgtgtggc cctgtctggc aagggggtgc tcctacaaag tcatggcagc ctggtgccaa       480
aaccatcatc ccataggacc tgctgtagct ttgccagaag cctggcccaa ggggtggagg       540
cccctggagc tctgacccac cacgtggagg gtgggaaatg ccacagagca ggttctctag       600
aagggattttg tcagaagcta aactggggtg ccccctgggc tcaggcctgc acagtttctc      660
cctgaccacc cagctgggat ggatatagag acaggtgtca tgttgcagaa agcctgccct       720
aagaggccct actggtgttt tcctttatta aaaaaaaaa aaaaaactc ga                 772
```

<210> 60
<211> 1198
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1189)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1191)
<223> n equals a,t,g, or c

<400> 60
```
tcgacccacg cgtccgattt aattcttatt ccccacagtt taggtatttt tcattagtac        60
atcaatttga cacactgaat gcaagactat taaggaagaa cgattaaata ttattttatt       120
```

```
ttgtgaagag ttggcagcag attacatctc aagaacttgc agagagagga aggtagatgg      180
acaatcctaa attgtaagat gttacaaaaa acagtgaagt aagagtactc ctgaagacta      240
aaatagagag gctggggttt gagccatttt actgagtagc ttagctggaa cctgatatca      300
gaagtagcct ttaacaaaaa gcctcttggc aattgtatgg tactaacaac tagagtactg      360
aagtgtaagt tgaaaccaag ttgcagtggg aaatcaaagg tgaggtagct tatttgaaac      420
cagcaaatga gacaggttgg acagttttaa aatctcttct aacaaagaaa ctgcacggta      480
gcaaggacta gcggttctca aagcccttct tttttcagtgt tctcattcac cttggcaccc      540
aagtatgttt aacaggccat gcattaaaaa taaatacaaa aatataaaag ccgcttaaag      600
ggaacttaca aactgacaat ctctcctctg tatttgtgtt catagtggct gggagtttaa      660
ttatatgcac aaaagttagg agccacttgt ttctgcacag actgtaggag caagatgagg      720
agatgggcag gttttggtaa gagcccccag ttctggtgga caggcatact tgtggcattg      780
ggtgcggcat tgctgggagg accacgtctt gggaggcgat tgacttttgg tttgtaattt      840
ccctttaaac aagaagagat ggctcacatt ttccatatat atctcaatga atgtactgta      900
ttactgtttt aaaaatttga tgaataataa atgaattggt ctccttttgt tatctggtcc      960
ttgtttaatt tgtttaaggg ttttttgtata caaaagttta catttttatg tatatttttc     1020
ttgtgtaaaa actgatgtaa tatgtgtatg aaacactgta tgtattatct gtatatagtg     1080
tgacaaaatc attttttcttt ctttcttttg gatgtattaa taaatcttgc tgtgaagtaa     1140
aaaaaaaaaa aaaaaaactc gagggggggc ccggtaccca ataaccctnt natgatct       1198
```

<210> 61
<211> 558
<212> DNA
<213> Homo sapiens

<400> 61
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ctgcaggaat tcagcacgag ytggcatgtg acaacccagg gctgcctgaa aatggatacc       60
aaatcctgta caagcgactc tacctgccag gagagtccct caccttcatg tgctacgaag      120
gctttgagct catgggtgaa gtgaccatcc gctgcatcct gggacagcca tcccactgga      180
acgggcccct gcccgtgtgt aaagtagcag aagcggcagc agagacgtcg ctggaagggg      240
ggaacatggc cctggctatc ttcatcccgg tcctcatcat ctccttactg ctgggaggag      300
cctacattta catcacaaga tgtcgctact attccaacct ccgcctgcct ctgatgtact      360
cccacccta cagccagatc accgtggaaa ccgagtttga caacccatt tacgagacag      420
gggaaaccag agagtatgag gtttctatct aaagagagct cacttgaga aggggacttg      480
tgaactcaac cacaatctcc tcgaggggggg gccggtaccc aattcgscct atagtgagtc      540
gtattacaat taatgggc                                                  558
```

<210> 62
<211> 616
<212> DNA
<213> Homo sapiens

<400> 62
```
gaattcggca cgagtcttga cagcctggtc accaagggtt tggaaaaagg ttctattgga       60
gtggagattg atgggtggaa aaaggagaga ggggagttgg acctgatacc aaagagatgt      120
tttcagccat caaccagctg caaaacaaga tgggcttcct tttcctacat attcttccaa      180
gcatcataaa tactcggtct gctccccaac ccacatcctg caggatgcag ccagagcaac      240
agccccactc cactctgaaa ccagtcatcc tagggatgat gatcatttct tagcttccct      300
gttggaggtc ggttggggtt ggctgatcgc tgcttggttc actcctgcac tggctgggcg      360
ttggctgcat ggtaaagctg ttccctgtct catcctgttg ggataaacag agtatcctag      420
gcatattttc tccagagcag tggcagacac aaagggtcaa cagaaaccct caaggttttg      480
tcatgcctac tcttgcaact agcacattgt catttcagcc tcatgctatt gaccaaagca      540
agtcacttga ccaaattcaa agccacaaaa ctcgtgccga attcgatatc aagcttatcg      600
ataccgtcga cctcga                                                    616
```

<210> 63

```
<211> 811
<212> DNA
<213> Homo sapiens

<400> 63
gaattcggca cgaggagctt ccatcttttc tgatgtgagt ggtgtcagga atgactatgg        60
tggtggtagt ggcagtggcg atggttttct ggaggctgaa aggttaaagt cccaatgcag       120
aagtgatgtc agggctagtg ggtggcggta gcaggtgcag taaagtcagg ttcagatgct       180
tcaatggtga ctcccttctc gtgttagtcc tacagcatca tttcagactt tgttcttggt       240
gcttagctcc aagcctcttc ctcctgctgt cctgtcaggt tgtgtccact atgatggagc       300
aagaccctgt catctatgat gatgatgacg acttgcctaa ttatttttct gtttaagcta       360
gccatagtgg atcctgttat ttgtgcctaa gagctcttac tgacaaagaa cgtgttaccg       420
gaagtgggat gctacaagta acaacactaa aagtagaatt gactaagtgc agcaggcagg       480
cctttgagca aggaggggac acacattaca ggctggaaag ctggtgactc ttgtaatgca       540
gtggcaaaat tttgcttcaa ctactatata caatacttga agatgcacac tgcaagctga       600
gtgaggctgt gataagaggg gaaatagtgg ggagcattca gaatgttggt ttacattgat       660
gacttcttgc tctttcagca gtcttgatag agcagctata cccacaccag agtcctccag       720
ctgacaagag aggtaaggag agaaactgct ttgccaggag gggccctctg ctgcagctgg       780
aggtccaagt tgaccgagag cccaaatttt g                                      811


<210> 64
<211> 993
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (370)
<223> n equals a,t,g, or c

<400> 64
ggcacgagcc caaagtgctg ggattacagg gagttgatga aagtggagat gttttttagag       60
ctacctatgc agcattcaga tgttctccta tttctggtct gctggaaagc catgggatcc      120
aaaaagtctc catcacattt ttccccagag gtaggggggga ttatscccag tttttgggatg      180
ttgaatgtca ccctcttaag gagcctcaca tgaaacacac gttgagattc caactctctg      240
gacaaagcat cgaagcagaa aatgagcctg aaaacgcatg cctttccacg gattccctca      300
ttaaaataga tcatttagtt aagccccgaa gacaagctgt gtcagargct tctgctcgca      360
tacctgacan gcagcttgat gtgactgctc gtggagttta tgccccagag gatgtgtaca      420
ggttcctgcc gactagtgtg ggggaatcac ggacacttaa agtcaatctg cgaaataatt      480
cttttattac acactcactg aagttttttga gtcccagaga gccattctat gtcaaacatt      540
ccaagtactc tttgagagcc cagcattaac atcaacatgc ccgtgcagtt caaaccgaag      600
tcccgcaggc aaatttgaag ctttgcttgt cattcaaaca gatgaaggca agagtattgc      660
tattcgacta attggtgaag ctcttggaaa aaattaacta gaatacattt ttgtgtaaag      720
taaattacat aagttgtatt ttgttaactt tatctttcta cactacaatt atgcytttgt      780
atatatattt tgtatgatgg atatctataa ttgtagattt tgtttttaca agctaatact      840
gaagactcga ctgaaatatt atgtatctag cccatagtat tgtacttaac ttttacaggt      900
gagaagagag ttctgtgttt gcattgatta tgatattctg aataaatatg gaatatattt      960
taaaaaaaaa aaaaaaaaaa aaaaaaaaaa att                                    993


<210> 65
<211> 689
<212> DNA
<213> Homo sapiens

<400> 65
gaattcggca cgagctaagg tgggcgggtc acttaagcct cgaactcctg gcctcaagca        60
```

```
atcctcctgc ctttccttcc caaagctatg aaattgcaga caggagccac catgcctggc       120
tggttttttgg gggccatggc aagtgcaggc ttgtcagagg aattggagaa gcagggatta       180
gttaggaaaa cctctccact tcttgtgttt catgccaggt agtgtttgta acttcagaac       240
ccgcccttac cttacctacc taccatgtta tgctcatttc acctactgtc ccctgctgta       300
tagggagtgc cttgagggca gagatcatgt tagttttgtt ccctcttctg tacagagggt       360
ggagcccagt acctggcaca gctgaaggag gaatgtgctg ctgctgtctc tgtatttcca       420
ggtactcctt gttgacctct agccaagaca aggaacctcc ttatgagatg tcatcttctg       480
agctctcttg atggagggaa taccacggtg atgattgaat atgaaaagtc ttggcacagt       540
ggctcacacc tgtaatccca cactttggg tggccgaggt gggaggattg cttgaagcca        600
ggcattgaga ccatccttgg ccaccaaacg agaccccatc tctacaaaaa aagaaaaaca       660
aaaccaaaaa aaaaaaaaaa aaactcgta                                        689
```

<210> 66
<211> 942
<212> DNA
<213> Homo sapiens

<400> 66

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gaattccagg actgctggga cccccctgcac ctcctggcca cggagagatc ctgctcccag        60
ggaccagcgt ctgggtggga cacagttcac tcctctctcc acttcatgtt cttttttcttc       120
agcagatggc tcaagttcct tgttttttctc cttgctttct gacagccgta gcttctgaaa       180
cctgccattt ttggtctcct gatgcctgat ttcctaattg tcctgactgt gtcttctagg        240
aagcattaag tctgaactga cttattaggg aacttcagaa agttaaacac acaaaaccct        300
ttctttgact cctatcttaa ggacatggag atacagttac atatatttat acacaaggat        360
attcatatgg caaaaacggg gagaaggcac aatttaagag cccaatggggg actgggattg       420
tgtatgcatc tgtacaatga catgttatga agtcattctg ttttttataa aactttttag        480
tgacatggga aaatacaaag aatgtaaaga atttaaaaag cagcgtacaa aacmatatat        540
gtgatccaat ttgtggtgga aatattttat ctatatatat ccattttaaa mcaccaarga        600
aaatacacag ttaacagtag ttatctttgg aaggcaggat tataagtgat cttagttttc        660
ttccttccac ttttgttacc gatatcagaa aaaaactctg tctctacgaa aataaaataa        720
aatgaaataa aataaaatta gctgggtgca gtggctcatg cctgttgcct cagctcctca        780
ggaggctgag gcgggagaat cacttgggcc cggcaggtcg aggctgcagt gagctaggat        840
cgtgccactg cactctagcc tgggtggcag caagaccttg tctcaaaaaa aaaaaaaaaa       900
aaaggaattc gatatcaagc ttatcgatac cgtcgacctc ga                          942
```

<210> 67
<211> 2309
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (13)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (652)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (677)
<223> n equals a,t,g, or c

<400> 67

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ggtaagagag aangtgtgaa gtcacctgtc tgttctagtc attccaatgg acattgtact        60
ggcccaggag gaaagaacca gatgtggttg tccagtcatc caaagcaagt ctctagcaca       120
aagcccgttc cactgaactg cccttctcca gtgcctcctc tgtatttgga tgatgatgga       180
ctcccctttc ccacggatgt gatccagcat aggttacggc aaatcgaagc agggtacaaa       240
caagaggtgg agcagctacg tcgacaggtg cgtgasttca gatgaggctg gacatccgtc       300
actgctgtgc ccctccagca gagcccccca tggactatga ggatgatttt acatgtttga       360
aggagtcaga tggcagtgat actgaggatt ttggctctga tcacagtgaa gactgccttt       420
cagaagcaag ctgggaacct gttgataaga aagagactga ggtgactcgc tgggttccag       480
accatatggc atcacactgc tataactgtg actgtgaatt ctggttggcc aaacgaagac       540
accattgcag aaattgtggg aatgtatttt gtgctggatg ctgccacctg aagctgccca       600
ttcctgatca gcaactctat gacccagttc tcgtctgtaa ctcatgttac gnaacacatt       660
caagtctctc gtgccanggg aactcatgag ccaacagctg aagaaaccca ttgctacagc       720
ttccagttga atgccgggga gaaacctgtc caattttagc aggtttgaag ggaggatctt       780
cttcagttgt agtttggaag gttccttggt gtggctcatg aaatcacaga gctcagagat       840
accatcttga gaaatcctcc ttggtatcat gaaactggag cagaggaatt gcaatttagc       900
aggaggtcct ctactggtga taccctcacc ttggggtaat ggtcctaacc cagacccagg       960
gtctggaaag cttaatgttg agttggtgac tccagcctct ttctcctgga ggtcacaaga      1020
tgatgattgc gtagatgttg cctggtgcaa agtgccccaa acagcaatag aaaggcatat      1080
gtataaccaa actccaagtg ataaccagac ccatctctcc tccaccttga caaaagcaga      1140
ttatagtata caaggtagga attcctgtcc tatttgagat gaactatatc ctgtacctct      1200
gtgctctgtg tctgcatgaa ggctcagcct ttagaggcac tccttctagt tgcattagta      1260
ctgtctttct gtggagtttg gtttgaagac tggctcagca agtggaggtt tcaatgtatt      1320
tttcagttgg ctcatcagcc agcattggtg aatattcagt ttaggggaac agttctaggg      1380
agtgagacat ttttgggagc agaggaaaac tctgctgatg ttcggtcctg gcaaacattg      1440
agttattttg agctgtgaag gcagtcgtct ctgttacaca gtggcagctc ttgagttatg      1500
cactgtgaag aatgagaagg gaaaagcaaa aattatcctt gtgaaatatc tgctgattgt      1560
gccctactct ttgcacctga cttttcctag ttgtcctggt gctaacacag gagctacacc      1620
ttgatcctct cctggcatga aaataaaaca aaggttttcg ttgttgttgt tccattgccc      1680
atttccccca tgttgtcttt cccttggctg atgcctcctc tgggtcacat tgcttcttat      1740
cctgaacact tgacaccttg agggtagaat ttagcgtttg gttttacct cctagcatat      1800
gctgtttggt atgtgagggt ttcagtacaa atgctgctgt ctatttctgt gcacttaaca      1860
atggaaccca aacagaagag aataaagcct tgataccaaa attgggaaag aacatgtgtc      1920
catttggacc aaacgttgtt ggttttaaa aaatttatt ttgttttttt gtttttgttt      1980
ttgttttttt tcatcttaat atgtaccagt ggcacttaac caaaagatac agtgatatag      2040
ccatgtatct gtctacttag cgtggctgtt ttgagggact gtcccatcag tgaacaaact      2100
gcatggcctt ggagagagac tctgggctct tggctcagat gtgttcatca aatactcctt      2160
tcagagctgt tgtgggtgta agtgacatga tgtggccaaa aatccaaact gtgcagttgc      2220
gttgtgacaa acatgcaatg tgctgtaaaa attcaataca gtttaaataa aatctctata      2280
ttagtaaaaa aaaaaaaaa aaactcgag                                          2309
```

```
<210> 68
<211> 814
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (421)
<223> n equals a,t,g, or c

<400> 68
tacgagtttt tttttttttt tttagccata attaccaaaa acattagtgc aggacaccat        60
tttaaaaaac tatttaaaat agtcttcaga gaaaaaatat taagtattac agtttaggag       120
tatattgact ttgggccaac ggattccaat attttacaaa aaggcaatat ccacgcaaca       180
tattccagat tcgggttgtg gagaagctgc agggcttgag gtgactctat cacaactgct       240
ttccgtacgg aggagccact gccaactgtg tggacgagaa tacttaagca cgtgcttcat       300
tgctccactg ccacaggtgg atatttcagg ggaattatta ttaatttcaa agttttttta       360
```

```
aaargytatg ataagtaaat aaaagtaatg gtaggaktca cggtcggaga gcttatcgcc      420
naagtctttc tatagccttc ccccggaagc cccagttcag gcatcggtca cccgaagtgt      480
caccctctga tctttccccc atcccatctg aggaagttaa agagatccct cacaggtacc      540
gtggctctcg gtgccctcgc acttccaaca gccggttcgg gcccaggaga ctcgctccga      600
cctccaccac aatggcggcc agtgtgggcc gcgcaaccag aagtgcggcc gcgcacctga      660
cccagcttcc gcctgcacct agagctcagc gcaccagccc ggctcagcca gacgaaggca      720
aacgaagaga tgcggatccc tggaggactg gccccaccgt gaacaaaaca ggaagcattc      780
caggaagact gcggggtgg gctcgtgccg aatc                                  814
```

<210> 69
<211> 788
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (370)
<223> n equals a,t,g, or c

<400> 69

```
gaattcggca cgaggcaatt ttcaatgaac cttgaatggt aggaagaatt gaagaagaaa       60
tcagagcatt tttgccttgc agaaggcagc tgctgtgatg gcaggaggct gaaatggaca      120
tggcctggca gaagagtatt atggggtggt gtgttgtga gccatctggc ctgtacaatt      180
tggagaaaca atactttttt ttttcttctc tgcaagctgg gcttcctgtg attgtgtcct      240
caggctgcac aaaaaatagcg tatggctttg ctgtgtattc accttcatct taaaatagct      300
agaacatttt ccctcttctt ttaaaaagtt tttaaatga gggttagact cttgtaggaa      360
aaggtagaan tcttaataac agtactcatg ttgacaaacc tttctcgtca aaattcctat      420
gtaatcaaga ctcttattaa atatgaacaa atgtaatgta tggaaattaa tgtttaccct      480
caaggtaaaa gctgaaatgg atttataaag aattatttta aacagcaata atgtttgagg      540
ggtgggggaa gtgagaaaaa tgaaatttta aatcacatgt ttatgactat gaagctagac      600
tttaaaaata ggtcagttag ggtatgactc ttataataca aaagtttatt tggtatacaa      660
aggatttata gctaatgtat ttttaatta tattcactaa tacttgtaaa agatcattca      720
atttataaag tttccaaaat aaacctgttt aaagtgtcaa aaaaaaaaa aaaaaaaaa      780
aaactcga                                                              788
```

<210> 70
<211> 791
<212> DNA
<213> Homo sapiens

<400> 70

```
gaattcggca cgagctcaag gctaaaatct tgatctctcc tgaatatgag gaggtgtgtt       60
aggcatgttt tggggattgg attaatagtg ttaaaaaatt tgtattttca caaaaatagc      120
atgtacccat cacccaaact cagcagcttt caagaagctt ttctttttt ctttcttatt      180
ttaaaaaatc ctttaacctt atgtagttag tatatctttt ttaaaaagta gaaaatcatg      240
taaccttagg attttagtt ttaatgtaga gtttcacaaa tttccatctt tagtaagaca      300
aaagggtcac atattggctg tctccttcaa ctatactttc ttcagtataa aatatgttta      360
ccatggttgt cattatcgag cacgtaactg catgttagac tctatgctaa gtgttttaca      420
taatcattta aagctcacta aggccctagg agtaattatt atcctcccat caaaaaggta      480
agtgaaatgt taacctgaag tttgactact ttaggtctct gagctagtaa gtacaatagc      540
caggtttcaa accaagatcc ttttaactgc agcacctgtg ccttatctgg tagcgtcatc      600
ttggttcata catttaaaaa agagttatct atgtgccggg tgccctggct catgcctgta      660
atcccagcac tttgggaggc cgaggagggc ggatcaccag gtcaggagtt tgagactgac      720
caataaggtg aaatcctgtc tctactaaaa aaaaagggg gggcccgtac ccaatcgccc      780
aaaaagatcg t                                                          791
```

```
<210> 71
<211> 804
<212> DNA
<213> Homo sapiens

<400> 71
gaattcggca cgagcggcac gagcttgaaa tggcgtcttc tgatgaacac tcatccatcc      60
ttcaaggtct actctctcat cacagcttgt gactcttcca cttttttgaac tggtgtttcc     120
cattcccagt tcacagagcc ctttctcatt gaactattta tctgagttcc ctctgccgga      180
acatgagcca tgcctagagt agccacctag tagtgagtga cagctctgtg ctggatgcac      240
ataaatggtc tcccttaact gccatgagsc ctaaagaagg tttgctacag ctattttaca      300
gatggggaaa actgacagag agatattaat gaattgccca catgcaaata tgtgctgagt      360
cttggatttg catctttatc gtgactccac ggagacccac cctctaagac cagagccagt      420
gtcctattca tcttttgtct ctgcagcgtt cagcatggca ctgtcttggc ttacaaaatc      480
tgctctatgc ttgctgactg ctgaatgaat gaatgaatga ataggtagtc acaaagaatg      540
tttagaatgt ttctcagaca ggctgagaaa aaacacaacg aaacattatt tccgtttgga      600
aagttttttt attttgtgt tcagtactga agtaaaacaa aaatctgaat aacagctgca       660
ccgttaaaaa tgaaattacc aatatatgaa ctctaggcat catgcatata taattttttg      720
tagataactt ttcttctcat tttccttctc attctcttca tcttttttctt tttgtttgag    780
caaaaaaaaa aaaaaaaaac tcga                                              804


<210> 72
<211> 783
<212> DNA
<213> Homo sapiens

<400> 72
gaattcggca cgagctaaaa cttacaatga catgttgttg cttgctctgt aagctccaag      60
gcattttttt tttcagtttt aattcaagtg ttctaaaaag tattttgggt acaaccagaa      120
ctctctctgc tccttggatt ggagtcagtg tgaaaggaac acagtgggct ctggggtcag      180
ctagacctgg atgtggatca cagctcacct cttcattggg aggcctcagg caagttattt      240
gccaacctca cctacaaaag catgatgcta agctcwtttc agtttagttg tggatatcag      300
agcatatgta tacaatgcct gccatagtga gtgcctggcc cttggcagac tgtcaaatgg      360
agctatggag cagcagcggg agtaatatta ttatctagac cttatctgtc cttttaaact      420
cagttcagat tccttctcct ttttaaatta ctgcaacctg attttacctg cccctgcctc      480
caagttgctg tatcagttag cctctgaaca attcatttag caattttaat tatatattgc      540
ttcttgacac tgctttgtga tcttaaaaac tctgcttcaa atacgtactt ggttgctttt      600
cctgagtgct gttaattcct gctctaacgg actaaagtaa tttgaaggca ggactaggtt      660
ttatgcatgg cacacagtct ggtgccttac atgtaactac tcacaaactt ttttgatcca      720
aaatttagaa acttcacacg cattcataag aaatcaataa aaaaaaaaaa aaaaactcg      780
tag                                                                     783


<210> 73
<211> 1523
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (8)
```

<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (15)
<223> n equals a,t,g, or c

<400> 73

```
ngggggggncc cccntttttt tttttttttt tttttttttt ttcagttcta ctattattta      60
tttttttaaa tattttgaa aaaatataat tttttacaa tattttcaac ttaaacacta        120
ttcacactga acacgtatgg cagcttaacc tacccaaata tgaagtttaa gaagccaaaa      180
ctgttctagc tttgttaaaa gttgtgctgc agactctcgt gatggttaac aaagcaagga      240
aaagcaccac tcaaatcata atgttacagt atctttgttc agctggatta tgggttggta      300
ttggtcatat gttagactcc atacaggcat agctatgatg cagtgaatcc cttagaagtt      360
acaattctca aattacatac ttcctcagat gtaacattag aactcaatat ttctaacaat      420
aacataccag aaaaggctgg actggcactc atctgctgac taacttgtag cctcagtaat      480
atgacatact tgcctttaac aaattatctc aaattaacta acagaccttc agaaaatgga      540
gattcttttt gatggggaca taatcaaatt taagtctgag aaatatgctt aacagttgga      600
actcaaatta aatgtactga ttttaaagtt tagacattaa caagtgatag attagcctca      660
aaaaaagaca atttggtaag gtttaggtct tttaatttgg tgcttgttca caacttgact      720
ggtgcttctt tccttgctgt cttcacatca agccatgggg ccaattctat tttcagtaaa      780
tgtttgacag ctttttactt agtaacagtc tcagcacttt tattaagcat gcaagactaa      840
caaaaacttt ggcaatgcat aagtgtaaca cagtgacaag agagcttta caattaagtc       900
ttctaatact gccttcacag tgtggaaatt gtgctacatc caccaaaaga gggccccgtc      960
tactcaaata tttccgtact tcaccccagg aacaaactcc tttgcatttg gattcagatt     1020
gctcttgacc acaagatctt ccagagaaga gccatcactg ataacaaggt cattaaactg     1080
gtcttggatt tggtccatag tttgtgggag atctcgagct ggaataaacc attcatgctc     1140
ttcttcctct tccagcattt cttggaaaca gcgttcaata aattcttctt cccataactc     1200
ctcttctatt tgtctgttga attcttcttc attttccatc cacatgtact ctgcaaatgg     1260
attgtcatct tcatgagaat gaccgttaat aatcacatct tcattgatga tgcttgggct     1320
agtactgctg cgacttggat ctttcatggc tgatgttggt tgtcgttttt aacccaatgc     1380
acagcagcgg ggacggcagc caacgaatcc tgtcggcctc cgcggatctc cacaggcagc     1440
gccgctcccc cgctcgacgt gcgcttcgcc cgccgcctcc cttctcccgg acgcgtgggc     1500
ggacgcgtgg gcggacgcgt ggg                                             1523
```

<210> 74
<211> 758
<212> DNA
<213> Homo sapiens

<400> 74

```
gaattcggca cgagacasgg tttcaccctg ttggccagga tggtctcaat ctcttgacct      60
cgtgatctgc ctgcctcggc ctcccaaagt gctaggatta caggcatgag ccactgtgcc      120
cggcctttgt tttttgagac cttttttatt ttgttgtcac ccaggctgaa gtgcagtggc      180
acaaacacag ttcactacag ccttgacctc ctgggctcaa gcaattctgc ctcagtccca      240
caagtaggtg ggcttacaaa tgcacagcat gacacctggc ttattttgt attttgtgtg        300
tgtgtgtgtg agccactgcg caggccttgg gcagctttct tgatctctgt tacctcatct       360
ataaaatgat gataataata gcttctccct tattggggaa ttgtaatgat taaatgagat      420
aacatgtaaa atgctcagta caggccaggc atggtggctc acgcttgcaa tcccagcact      480
ttgggaggct gaggctgcta gatctcttga ggccagcagt taagaccagc ctggccaata      540
tggtgaaacc ctgtgtctac caaaaaatac agaaagtcag ccaggcatgg tggtcatgc        600
ctgtggtccc agctactcag aggctgaggt gggagaatca cttgagcccg ggagacagaa      660
gttgaagtga gccaagatgg cgccactgca ctctagcatg ggctacagag tgagagcctc      720
tctcaaaaaa aaaaaaaaaa aaaaaaaaaa aactcgta                             758
```

<210> 75

```
<211> 1096
<212> DNA
<213> Homo sapiens

<400> 75
 ccccacggct cccatggcct cttcctgcgc taccgtgtgg aggccctaac cctgcgtggc      60
 atcaatagct tccgccagta caagtatgac ctggtggcag tgggcaaggc tttggagggc     120
 atgttccgca agctcaacca cctcctggag cgcctgcacc agtccttctt cctctacttg     180
 ctccccggcc tctcccgctt cgtctccatc ggcctctaca tgcccgctgt cggcttcttg     240
 ctcctggtcc ttggtctcaa ggctctggaa ctgtggatgc agctgcatga ggctggaatg     300
 ggccttgagg agcccggggg tgcccctggc cccagtgtac cccttccccc atcacagggt     360
 gtggggctgg cctcgctcgt ggcacctctg ctgatctcac aggccatggg actggccctc     420
 tatgtcctgc cagtgctggg ccaacacgtt gccacccagc acttcccagt ggcagaggct     480
 gaggctgtgg tgctgacact gctggcgatt tatgcagctg cctggccct gccycacaat      540
 acccaccggg tggtaagcac acaggcccca gacaggggct ggatggcact gaagctggta     600
 gccctgatct acctagcact gcagctgggc tgcatcgccc tcaccaactt ctcactgggc     660
 ttcctgctgg ccaccaccat ggtgcccact gctgcgcttg ccaagcctca tgggccccgg     720
 accctctatg ctgccctgct ggtgctgacc agcccggcag ccacgctcct tggcagcctg     780
 ttcctgtggc gggagctgca ggaggcgcca ctgtcactgg ccgagggctg gcagctcttc     840
 ctggcagcgc tagcccaggg tgtgctggag caccacacta cggcgccctg ctcttcccac     900
 tgctgtccct gggcctctac ccctgctggc tgcttttctg gaatgtgctc ttctggaagt     960
 gagatctgcc tgtccgggct gggacagaga ctccccaagg accccattct gcctccttct    1020
 ggggaaataa atgagtgtct gtttcagcar mwaaaaaaaa aaaaaaaaaa aaaaaaaaaa    1080
 aaaaaaaagg gcggcc                                                    1096


<210> 76
<211> 1230
<212> DNA
<213> Homo sapiens

<400> 76
 cacgagtgcc gctaaccttc ttcatccttt ggtggcaaag tagaaagatt ccagaattaa      60
 ctcgaccttt ctaaagacct gggctcagag gcagctggca ctgactgagc acccactatg     120
 tgccaggcac tgtgctgaat gcattagatc atcaattatg aatttgacac caaggacctg     180
 gtgtgcctgg gcctgagcag catcgttggc gtctggtacc tgctgaggaa gcactggatt     240
 gccaacaacc ttttttggcct ggccttctcc cttaatggag tagagctcct gcacctcaac     300
 aatgtcagca ctggctgcat cctgctgggc ggactcttca tctacgatgt cttctgggta     360
 tttggcacca atgtgatggt gacagtggcc aagtccttcg aggcaccaat aaaattggtg     420
 tttccccagg atctgctgga gaaaggcctc gaagcaaaca ctttgccat gctgggactt      480
 ggagatgtcg tcattccagg gatcttcatt gccttgctgc tgcgctttga catcagcttg     540
 aagaagaata cccacaccta cttctacacc agctttgcag cctacatctt cggcctgggc     600
 cttaccatct tcatcatgca catcttcaag catgctcagc ctgccctcct atacctggtc     660
 cccgcctgca tcggttttcc tgtcctggtg gcgctggcca agggagaagt gacagagatg     720
 ttcagttatg aggagtcaaa tcctaaggat ccagcggcag tgacagaatc caaagaggga     780
 acagaggcat cagcatcgaa ggggctggag aagaaagaga aatgatgcag ctggtgcccg     840
 agcctctcag ggccagacca gacagatggg ggctgggccc acacaggcgt gcaccggtag     900
 agggcacagg aggccaaggg cagctccagg acaggcagg gggcagcagg atacctccag      960
 ccaggcctct gtggcctctg tttccttctc cctttcttgg ccctcctctg ctcctcccca    1020
 caccctgcag gcaaaagaaa ccccagctt ccccctccc cgggagccag gtgggaaag      1080
 tgggtgtgat ttttagattt tgtattgtgg actgattttg cctcacatta aaaactcatc    1140
 ccatggccag ggcgggccac tgtgctcctg gaaaaaaaa aaaaaaaaaa aaaaaaaaaa    1200
 aaaaaaaaaa aaaaaaaaaa ggggaggggc                                    1230


<210> 77
<211> 911
<212> DNA
```

<213> Homo sapiens

<400> 77

```
tcgacccacg cgtccgtctt cctaaaaggg atgccctcca aagaaatttt aaaagaatct    60
tatcaagggg ccctggagaa gaaagggatg tgagggtcaa gtcacaactt tgaggggaaa   120
tagaaagagg gctcctttct gagaaagaag aatttcaaag agtccaagag aaccaaaaat   180
tcaggaccca ggagggtaag cattcctgtt tttgcaagct tcacagacca tttgagtgag   240
tgggtttttc aggtgacatt taaatgaaca aataatatcc atgtctcagg gtcagaaatg   300
gtactttgca actgattctg tccctcttga gaggcttctg caagactgag agggtgggat   360
gacttaatga acattaaaaa caatgttatt aggckggata tggtggcaca tgcctgtaat   420
tctagcactt tgggargctg aggtgggcag gcccargart tcaagaccag tctgggcaac   480
atggtgagac cctgtatcta ataaaaatac aaaaatttag ccaggcatgg tggcacacac   540
ctggagtccc agctactcag gagactgagg tgggaagatc acctgagctc aggaagtcga   600
ggctgcagtg agccaagatt gcactactgc actctagcct acatggatag gagtgagacc   660
tgtttgaaaa acaaaaaaca atcaaaaaca aaaaaaaaca acccacacaa tgttattttt   720
aaaatactga ggggagagaa gttggggaaa aaaagggaaa acctaaaact ctccataatc   780
ctaccatcag aaaattacac taatgtgata agtgactttc tcccctctga atctccaatt   840
ccattacttg tagtaaatat gaatcttatt ccacaaactc agacatgcaa aaaaaaaaaa   900
aaagggcggc c                                                        911
```

<210> 78
<211> 488
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (324)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (438)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (484)
<223> n equals a,t,g, or c

<400> 78

```
accgcagggg ctcccggacc ctgactctgc agccgaaccg gcacggtttc gtggggaccc    60
aggcttgcaa agtgacggtc attttctctt tctttctccc tcttgagtcc ttctgagatg   120
atggctctgg gcgcacggga gctacccggg tctttgtcgc gatggtagcg gcggctctcg   180
gcggccaccc tctgctggga gtgagcgcca ccttgaactc ggttctcaat ccaacgcta    240
tcaagaacct gcccccaccg ctgggcggcg ctgcggggca cccaaggctc tgcagtcagc   300
gccgcgccgg gaatcctgta cccnggcgg gaataagtac cagaccattg acaactacca   360
gccgtacccs ttgcgcaaaa gaacraaaga aatttgccgc actgaaataa atttacttgc   420
gcctaattcc ccaccccncc cggaaagggg aaacccccgg ggcgtttttc caaattcttt   480
tttnttcc                                                            488
```

<210> 79
<211> 753
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (745)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (752)
<223> n equals a,t,g, or c

<400> 79
```
gaattcggca cgagcggcgg gggtccatcc accccggtga gcaggcccaa ggcagcgggg      60
gcccacaccc ctcacacgca aaactggctt cttctggtca ctggtgtctg aaaccaaatc     120
cagagcagcc tgtggcctgt aaagcatata tttctaatga ctgcagactg gtgggatcat     180
aggagccttc tgaatgacca ggactgcttt cttggagct gatgaaaatg tactctttta      240
gcgtgttaga aatcacttgt tttattttgt ttctttggcc aagctgggtc tagtgtttct     300
tttgctggga atagactttc aaaagttgta cttctatcaa gaaacaaaac tgcccttgca     360
gaaatttcag gtcttttgtt aagcctgtat tggtcttaag gtgcagtatt ttttaaatta     420
ttatttatag aaagaatcta taaattcttg gggaagtgtg ttataagctt taataattac     480
attgagctgc acctcagtgg tgtgtcatta acatgcagtg gggttaatat ctgaggcctc     540
agatgacttt gtgcctttg gaataaaggg taaaataaac tctcccagag taagagctgt      600
atcgtgaatt gtcatactaa ttattgaggg ggacttatgt gcttttattg aatggagtgc     660
tttacaattt ttatttttaa atggggttgg gatccttgga atatttcaat aaaattgata     720
aaatataaaa aaaaaaaaaa agggnggccg cnc                                  753
```

<210> 80
<211> 2138
<212> DNA
<213> Homo sapiens

<400> 80
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tggatgatga tggactcccc tttcccacgg atgtgatcca gcataggtta cggcaaatcg      60
aagcagggta caaacaagag gtggagcagc tacgtcgaca ggtgcgtgac tcagatgagr     120
ctggacatcc gtcactgctg tgcccctcca gcagagcccc catggactat gaggatgatt     180
ttacatgttt gaaggagtca gatggcagtg atactgagga ttttggctct gatcacagtg     240
aagactgcct ttcagaagca agctgggaac ctgttgataa gaaagagact gaggtgactc     300
gctgggttcc agaccatatg gcatcacact gctataactg tgactgtgaa ttctggttgg     360
ccaaacgaag acaccattgc agaaattgtg ggaatgtatt ttgtgctgga tgctgccacc     420
tgaagctgcc cattcctgat cagcaactct atgacccagt tctcgtctgt aactcatgtt     480
acgraacaca ttcaagtctc tcgtgccagg gaactcatga gccaacagct gaagaaaccc     540
attgctacag cttccagttg aatgccgggg agaaacctgt ccaatttttag caggtttgaa     600
gggaggatct tcttcagttg tagtttggaa ggttccttgg tgtggctcat gaaatcacag     660
agctcagaga taccatcttg agaaatcctc cttggtatca tgaaactgga gcagaggaat     720
tgcaatttag caggaggtcc tctactggtg ataccctcac cttggggtaa tggtcctaac     780
ccagacccag ggtctggaag cttaatgttg agttggtgac tccagcctct ttctcctgga     840
ggtcacaaga tgatgattgc gtagatgttg cctggtgcaa agtgccccaa acagcaatag     900
aaaggcatat gtataaccaa actccaagtg ataaccagac ccatctctcc tccaccttga     960
caaaagcaga ttatagtata caaggtagga attcctgtcc tatttgagat gaactatatc    1020
ctgtacctct gtgctctgtg tctgcatgaa ggctcagcct ttagaggcac tccttctagt    1080
tgcattagta ctgtctttct gtggagtttg gtttgaagac tggctcagca agtggaggtt    1140
tcaatgtatt tttcagttgg ctcatcagcc agcattggtg aatattcagt ttaggggaac    1200
agttctaggg agtgagacat ttttgggagc agaggaaaac tctgctgatg ttcggtcctg    1260
gcaaacattg agttattttg agctgtgaag gcagtcgtct ctgttacaca gtggcagctc    1320
ttgagttatg cactgtgaag aatgagaagg gaaaagcaaa aattatcctt gtgaaatatc    1380
tgctgattgt gccctactct ttgcacctga cttttcctag ttgtcctggt gctaacacag    1440
gagctacamc ttgatcctct cctggcatga aaataaaaca aaggttttcg ttgttgttgt    1500
tccattgccc atttcccca tgttgtcttt cccttggctg atgcctcctc tgggtcacat     1560
```

```
tgcttcttat cctgaacact tgacaccttg agggtagaat ttagcgtttg gtttttacct    1620
cctagcatat gctgtttggt atgtgagggt ttcagtacaa atgctgctgt ctatttctgt    1680
gcacttaaca atggaaccca aacagaagag aataaagcct tgataccaaa attgggaaag    1740
aacatgtgtc catttggacc aaacgttgtt ggtttttaaa aaattttatt ttgttttttt    1800
gttttttgttt ttgtttttttt tcatcttaat atgtaccagt ggcacttaac caaaagatac    1860
agtgatatag ccatgtatct gtctacttag cgtggctgtt ttgagggact gtcccatcag    1920
tgaacaaact gcatggcctt ggagagagac tctgggctct tggctcagat gtgttcatca    1980
aatactcctt tcagagctgt tgtgggtgta agtgacatga tgtggccaaa aatccaaact    2040
gtgcagttgc gttgtgacaa acatgcaatg tgctgtaaaa attcaataca gtttaaataa    2100
aatctctata ttagtaaaaa aaaaaaaaaa aaactcga                           2138
```

<210> 81
<211> 1327
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (5)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (7)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (9)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (10)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1205)
<223> n equals a,t,g, or c

<400> 81
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aaccnangnn taccggtccg gaattcccgg gtcggaccca cgcgtccgcg gcgggcgacg     60
cacgtcgagc gggggagcgg cgctgcctgt ggagatccgc ggaggccgac aggattcgtt    120
ggctgccgtc cccgctgctg tgcattgggt taaaaacgac aaccaacatc agccatgaaa    180
gatccaagtc gcagcagtac tagcccaagc atcatcaatg aagatgtgat tattaacggt    240
cattctcatg aagatgacaa tccatttgca gagtacatgt ggatggaaaa tgaagaagaa    300
ttcaacagac aaatagaaga ggagttatgg gaagaagaat ttattgaacg ctgtttccaa    360
gaaatgctgg aagaggaaga agagcatgaa tggtttattc cagctcgaga tctcccacaa    420
actatggacc aaatccaaga ccagtttaat gaccttgtta tcagtgatgg ctcttctctg    480
gaagatcttg tggtcaagag caatctgaat ccaaatgcaa aggagtttgt tcctggggtg    540
aagtacggaa atatttgagt agacggggcc ctcttttggt ggatgtagca caatttccac    600
actgtgaagg cagtattaga agacttaatt gtaaaagctc tcttgtcact gtgttacact    660
tatgcattgc caaagttttt gttagtcttg catgcttaat aaaagtgctg agactgttac    720
taagtaaaaa gctgtcaaac atttactgaa aatagaattg gccccatggc ttgatgtgaa    780
gacagcaagg aaagaagcac cagtcaagtt gtgaacaagc accaaattaa aagacctaaa    840
ccttaccaaa ttgtcttttt ttgaggctaa tctatcactt gttaatgtct aaactttaaa    900
```

```
atcagtacat ttaatttgag ttccaactgt taagcatatt tctcagactt aaatttgatt      960
atgtccccat caaaaagaat ctccattttc tgaaggtctg ttagttaatt tgagataatt     1020
tgttaaaggc aagtatgtca tattactgag gctacaagtt agtcagcaga tgagtgccag     1080
tccagccttt tctggtatgt tattgttagr aatattgagt tctaatgtta catctgaggr     1140
agtatgtaat tgagrattgt aacttctaag gggttcactg catcatrgct atgcctgtat     1200
ggrgntctwa ccatatgacc mataccamcc cwtaatccca gctgraccaa rgrtacckgt     1260
aaccattwwg gatttgaggg gkggcctttc ccyggcyttg kttwacccmt ccacggagaa     1320
tctggca                                                                1327
```

<210> 82
<211> 758
<212> DNA
<213> Homo sapiens

<400> 82
```
gaattcggca cgagacacgg tttcaccctg ttggccagga tggtctcaat ctcttgacct       60
cgtgatctgc ctgcctcggc ctcccaaagt gctaggatta caggcatgag ccactgtgcc      120
cggcctttgt tttttgagac cttttttatt ttgttgtcac ccaggctgaa gtgcagtggc      180
acaaacacag ttcactacag ccttgacctc ctgggctcaa gcaattctgc ctcagtccca      240
caagtaggtg ggcttacaaa tgcacagcat gacacctggc ttattttttgt attttgtgtg      300
tgtgtgtgtg agccactgcg caggccttgg gcagctttct tgatctctgt tacctcatct      360
ataaaatgat gataataata gcttctccct tattggggaa ttgtaatgat taaatgagat      420
aacatgtaaa atgctcagta caggccaggc atggtggctc acgcttgcaa tcccagcact      480
ttgggaggct gaggctgcta gatctcttga ggccagcagt taagaccagc ctggccaata      540
tggtgaaacc ctgtgtctac caaaaaatac agaaagtcag ccaggcatgg tggtgcatgc      600
ctgtggtccc agctactcag aggctgaggt gggagaatca cttgagcccg ggagacagaa      660
gttgaagtga gccaagatgg cgccactgca ctctagcatg ggctacagag tgagagcctc      720
tctcaaaaaa aaaaaaaaaa aaaaaaaaa aactcgta                               758
```

<210> 83
<211> 47
<212> PRT
<213> Homo sapiens

<400> 83
```
Met Gly Ser Cys Ala Ala Phe Leu Leu Ala Ala Leu Ser Leu Leu Gly
1               5                   10                  15


Val Leu Gly Gly Tyr Pro Gly Arg Arg Ala Phe Ile Leu Pro Asn Arg
            20                  25                  30


Arg Ser Leu Arg Gln Trp Leu Glu Val Ser Leu Gly Pro Val Ser
        35                  40                  45
```

<210> 84
<211> 37
<212> PRT
<213> Homo sapiens

<400> 84
```
Met Asn Glu Ala Pro Pro Leu Ser Ser Ser Ser Ile Cys Phe Ile Leu
1               5                   10                  15


Phe Tyr Phe Phe Pro Leu Leu Pro Pro Leu Ser Ser Thr Cys Phe Ser
```

Lys Gly Asn Arg His
        35

<210> 85
<211> 52
<212> PRT
<213> Homo sapiens

<400> 85
Met Cys Gln Asn Arg Glu Ser Val Leu Val Leu Leu Ile Glu Ser Asn
 1   5   10   15

Met Phe Ser Phe Tyr Leu Leu Phe Ser Phe Tyr Ile Val Phe Ser Phe
            20   25   30

Phe Ile Val Leu Arg Pro Leu Pro Arg Asn Glu Ser Ile Lys Lys Ile
        35   40   45

Gly Val Ile Phe
      50

<210> 86
<211> 25
<212> PRT
<213> Homo sapiens

<400> 86
Met Thr Val Leu Ala Lys Arg Leu Val Leu Phe Leu Gly His Ile Phe
 1   5   10   15

Leu Leu Leu Cys Val Arg Ile Leu Asp
            20   25

<210> 87
<211> 77
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (43)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 87
Met Ala Ala Arg Ser Ala Leu Ala Leu Leu Leu Leu Leu Pro Val Leu
 1   5   10   15

Leu Leu Pro Val Gln Ser Arg Ser Glu Pro Glu Thr Thr Ala Pro Thr
            20   25   30

Pro Thr Pro Ile Pro Gly Gly Asn Ser Ser Xaa Ser Arg Pro Leu Pro
            35   40   45

Ser Ile Glu Leu His Ala Cys Gly Pro Tyr Pro Lys Pro Gly Leu Leu
    50   55   60

Ile Leu Leu Ala Pro Leu Ala Leu Trp Pro Ile Leu Leu
65   70   75

<210> 88
<211> 37
<212> PRT
<213> Homo sapiens

<400> 88
Met Cys Tyr Ile Pro Gly Ser Thr Gly Gly Gln Cys Trp Pro Trp Cys
  1   5   10   15

Trp Cys Trp Leu Cys Arg Glu Ala Leu Glu Trp Leu Cys Gly Ala Val
         20   25   30

Ser Ala Gly Pro Ala
        35

<210> 89
<211> 43
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (40)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 89
Met Leu Leu Arg Ile Ile His Leu Val Ile Phe Phe Ile Asn Phe Ser
  1   5   10   15

Thr Ser Val Val Ile Val His Tyr Asn Val Leu Asn Tyr Arg Cys Leu
         20   25   30

Leu Lys Cys Arg Cys Arg Val Xaa Lys Tyr Ser
        35   40

<210> 90
<211> 59
<212> PRT
<213> Homo sapiens

<400> 90
Met Gln Asn Cys Leu Gly Ser Leu Ile Pro Gly Val Leu Phe Ser Leu
  1   5   10   15

Leu Leu Leu Pro Ser Met Phe Asn Ile Ile Leu Thr Gln Ser Lys Tyr
         20   25   30

Gly Glu Asn Ser Tyr Pro Ala Cys Phe Tyr Ser Ser Ser Asn Phe Pro
        35   40   45

```
Val Ser Ala Ile Thr Phe Leu Val Gly Val Val
    50                      55
```

<210> 91
<211> 54
<212> PRT
<213> Homo sapiens

<400> 91
```
Met Val Val Ile Val Leu Thr Ser Asn Val Cys Ile Cys Gly Tyr Val
1               5                   10              15

Val His Ser Ala Leu Ile Pro Arg Arg Gln Gly Leu Phe Leu Phe Leu
            20                  25                  30

Phe Leu Val Met Phe Tyr Phe Ser Ile Ala Phe Asn Arg Ile Thr Lys
            35                  40                  45

Gly Thr Leu Ser Ser Gln
    50
```

<210> 92
<211> 50
<212> PRT
<213> Homo sapiens

<400> 92
```
Met Val Ala Gln Leu Val Gly Cys Val Val Ser Cys Leu Phe Val Leu
1               5                   10              15

Leu Arg Phe Leu Ile Ser Thr Phe Gly Ile Met Ser Phe Asn Gly Phe
            20                  25                  30

Val Ile Phe Val Thr Val Leu Ala Ala Tyr Asn Phe Ser Ala Gly Ala
            35                  40                  45

Phe Thr
    50
```

<210> 93
<211> 155
<212> PRT
<213> Homo sapiens

<400> 93
```
Met Trp Pro Gln Glu Ala Trp Val Cys Ile Leu Val Leu Leu Gly Thr
1               5                   10              15

Arg Val Gly Leu Cys Val Gly Asp Ser Leu Ala Pro Gln Ala Ser Leu
            20                  25                  30

Ser Tyr Cys Tyr Ile Leu Lys Val Pro Leu Arg Pro Lys Pro Leu Trp
            35                  40                  45
```

Gln Leu Ser Asn Glu Ser Ile Cys Ser Glu Tyr Arg Val Glu Gly Gly
       50   55   60

Gln Gly His Gln Glu Leu Arg Met Phe Leu Arg Leu Met Arg Pro Arg
 65   70   75   80

Tyr Trp Val His Gly Gly Pro Arg Ser Leu Cys Asp Ser Cys Ser Leu
                 85   90   95

Leu Pro Pro Cys Leu Asp Pro Ala Ser Ala Gln Lys Ala Asn Ser Leu
                100   105   110

Asp Ser Lys Gly Leu Pro Arg Pro Ile Ser Met Ser Cys Ser Cys Gln
            115   120   125

Leu Pro Val Pro Ser Leu Asp Leu Ser Ser Cys Leu Ala Pro Ser Leu
    130   135   140

Pro Thr Pro His Ile Phe Thr Asn Lys Arg Lys
145   150   155

<210> 94
<211> 60
<212> PRT
<213> Homo sapiens

<400> 94
Met Ser His His Ala Arg Pro Tyr Lys Ala Phe Arg Ile Val Ser Cys
 1   5   10   15

Tyr Phe Tyr Leu Phe Ile Ile Val Val Val Ile Ile Leu Leu Leu Tyr
                20   25   30

Pro Ile Ser Gln Gly Trp His Val Ala Asn Ile Val Phe Leu Lys Asn
            35   40   45

Ile Ser Asp His Ile Leu Val Leu Leu Lys Thr Phe
    50   55   60

<210> 95
<211> 70
<212> PRT
<213> Homo sapiens

<400> 95
Met Trp Phe Glu Ile Leu Pro Gly Leu Ser Val Met Gly Val Cys Leu
 1   5   10   15

Leu Ile Pro Gly Leu Ala Thr Ala Tyr Ile His Arg Phe Thr Asn Gly
            20   25   30

Gly Lys Glu Lys Arg Val Ala His Phe Gly Tyr His Trp Ser Leu Met
            35   40   45

Glu Arg Asp Arg Arg Ile Ser Gly Val Asp Arg Tyr Tyr Val Ser Lys
    50   55   60

Gly Leu Glu Asn Ile Asp
 65   70

<210> 96
<211> 36
<212> PRT
<213> Homo sapiens

<400> 96
Met Val Phe Leu Leu Leu Leu Leu Phe Gly Phe Phe Phe Asp Gly Ser
 1   5   10   15

Leu Arg Ser Pro Leu Leu Leu Ile Ile His Leu Gly Pro Ala Pro Thr
               20   25   30

Phe Leu Gln Ile
         35

<210> 97
<211> 59
<212> PRT
<213> Homo sapiens

<400> 97
Met Leu Cys Gln Thr Ile Pro Leu Cys Asn Arg Leu His Ile Val Phe
 1   5   10   15

Met Ile Leu Ile Lys Leu Tyr Val Glu Thr Glu Cys Glu Val Lys Ser
               20   25   30

Glu His Lys Lys Ile Met His Asp Glu Ile Ala Tyr His Phe Ile Gly
           35   40   45

Tyr Leu Leu Cys Ile Tyr Thr Leu Arg Pro Leu
         50   55

<210> 98
<211> 43
<212> PRT
<213> Homo sapiens

<400> 98
Met Ser Val Ser Ser Asn Leu Trp Gln Thr Leu Ile Leu Leu Leu Ser
 1   5   10   15

Leu Trp Phe Cys Leu Phe Pro Glu Cys His Ile Val Gly Ile Ile Gln
               20   25   30

Leu Cys Arg Leu Phe Arg Leu Pro Ser Phe Thr
           35   40

<210> 99
<211> 31

<212> PRT
<213> Homo sapiens

<400> 99
Met Cys Cys Arg Ala Gly Gly Ser Gln Ser Pro Gln Val Met Val Val
 1   5   10   15

Leu Ile Ile Ile Leu Gly Pro Trp Gly Gly Val Arg Ile Asp Ala
            20   25   30

<210> 100
<211> 180
<212> PRT
<213> Homo sapiens

<400> 100
Met Tyr Ser Cys Leu Leu Leu Pro Asp Leu Leu Tyr Leu Thr Leu Ser
 1   5   10   15

Pro Leu Val Val Ala Met Leu Leu Thr Pro His Phe Asn Val Ala Asn
            20   25   30

Pro Gln Asn Leu Leu Ala Gly Leu Trp Leu Glu Asn Glu His Ser Phe
            35   40   45

Thr Leu Met Ala Pro Glu Arg Ala Arg Thr His His Cys Gln Pro Glu
        50   55   60

Glu Arg Lys Val Leu Phe Cys Leu Phe Pro Ile Val Pro Asn Ser Gln
65   70   75   80

Ala Gln Val Gln Pro Pro Gln Met Pro Pro Phe Cys Cys Ala Ala Ala
                85   90   95

Lys Glu Lys Thr Gln Glu Glu Gln Leu Gln Glu Pro Leu Gly Ser Gln
            100   105   110

Cys Pro Asp Thr Cys Pro Asn Ser Leu Cys Pro Ser His Thr Gln Leu
            115   120   125

Thr Lys Ala Asn Thr Leu Ser Leu Phe Phe Phe Phe Ser Phe Phe Leu
            130   135   140

Ser Arg Val Ser Leu Leu Ser Pro Arg Leu Glu Cys Asn Gly Arg Ile
145   150   155   160

Leu Ala His Cys Asn Leu His Leu Pro Gly Ser Ser Asn Ser Pro Val
                165   170   175

Ser Ala Ser Arg
            180

<210> 101

<211> 211
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (45)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (195)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 101
```
Met Arg Leu Phe Leu Trp Asn Ala Val Leu Thr Leu Phe Val Thr Ser
 1               5                  10                  15

Leu Ile Gly Ala Leu Ile Pro Glu Pro Glu Val Lys Ile Glu Val Leu
            20                  25                  30

Gln Lys Pro Phe Ile Cys His Arg Lys Thr Lys Gly Xaa Asp Leu Met
            35                  40                  45

Leu Val His Tyr Glu Gly Tyr Leu Glu Lys Asp Gly Ser Leu Phe His
        50                  55                  60

Ser Thr His Lys His Asn Asn Gly Gln Pro Ile Trp Phe Thr Leu Gly
65                  70                  75                  80

Ile Leu Glu Ala Leu Lys Gly Trp Asp Gln Gly Leu Lys Gly Met Cys
                85                  90                  95

Val Gly Glu Lys Arg Lys Leu Ile Ile Pro Pro Ala Leu Gly Tyr Gly
            100                 105                 110

Lys Glu Gly Lys Gly Lys Ile Pro Pro Glu Ser Thr Leu Ile Phe Asn
            115                 120                 125

Ile Asp Leu Leu Glu Ile Arg Asn Gly Pro Arg Ser His Glu Ser Phe
    130                 135                 140

Gln Glu Met Asp Leu Asn Asp Asp Trp Lys Leu Ser Lys Asp Glu Val
145                 150                 155                 160

Lys Ala Tyr Leu Lys Lys Glu Phe Glu Lys His Gly Ala Val Val Asn
                165                 170                 175

Glu Ser His His Asp Ala Leu Val Glu Asp Ile Phe Asp Lys Glu Asp
            180                 185                 190

Glu Asp Xaa Tyr Gly Phe Ile Ser Ala Arg Glu Phe Thr Tyr Lys His
            195                 200                 205

Asp Glu Leu
    210
```

```
<210> 102
<211> 621
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (137)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 102
Met Gly Leu Leu Ser Asp Pro Val Arg Arg Arg Ala Leu Ala Arg Leu
  1               5                  10                  15

Val Leu Arg Leu Asn Ala Pro Leu Cys Val Leu Ser Tyr Val Ala Gly
             20                  25                  30

Ile Ala Trp Phe Leu Ala Leu Val Phe Pro Pro Leu Thr Gln Arg Thr
         35                  40                  45

Tyr Met Ser Glu Asn Ala Met Gly Ser Thr Met Val Glu Glu Gln Phe
     50                  55                  60

Ala Gly Gly Asp Arg Ala Arg Ala Phe Ala Arg Asp Phe Ala Ala His
 65                  70                  75                  80

Arg Lys Lys Ser Gly Ala Leu Pro Val Ala Trp Leu Glu Arg Thr Met
             85                  90                  95

Arg Ser Val Gly Leu Glu Val Tyr Thr Gln Ser Phe Ser Arg Lys Leu
            100                 105                 110

Pro Phe Pro Asp Glu Thr His Glu Arg Tyr Met Val Ser Gly Thr Asn
            115                 120                 125

Val Tyr Gly Ile Leu Arg Ala Pro Xaa Ala Ala Ser Thr Glu Ser Leu
    130                 135                 140

Val Leu Thr Val Pro Cys Gly Ser Asp Ser Thr Asn Ser Gln Ala Val
145                 150                 155                 160

Gly Leu Leu Leu Ala Leu Ala Ala His Phe Arg Gly Gln Ile Tyr Trp
                165                 170                 175

Ala Lys Asp Ile Val Phe Leu Val Thr Glu His Asp Leu Leu Gly Thr
            180                 185                 190

Glu Ala Trp Leu Glu Ala Tyr His Asp Val Asn Val Thr Gly Met Gln
            195                 200                 205

Ser Ser Pro Leu Gln Gly Arg Ala Gly Ala Ile Gln Ala Ala Val Ala
    210                 215                 220

Leu Glu Leu Ser Ser Asp Val Val Thr Ser Leu Asp Val Ala Val Glu
225                 230                 235                 240

Gly Leu Asn Gly Gln Leu Pro Asn Leu Asp Leu Leu Asn Leu Phe Gln
                245                 250                 255
```

Thr Phe Cys Gln Lys Gly Gly Leu Leu Cys Thr Leu Gln Gly Lys Leu
            260   265   270

Gln Pro Glu Asp Trp Thr Ser Leu Asp Gly Pro Leu Gln Gly Leu Gln
            275   280   285

Thr Leu Leu Leu Met Val Leu Arg Gln Ala Ser Gly Arg Pro His Gly
    290   295   300

Ser His Gly Leu Phe Leu Arg Tyr Arg Val Glu Ala Leu Thr Leu Arg
305   310   315   320

Gly Ile Asn Ser Phe Arg Gln Tyr Lys Tyr Asp Leu Val Ala Val Gly
            325   330   335

Lys Ala Leu Glu Gly Met Phe Arg Lys Leu Asn His Leu Leu Glu Arg
            340   345   350

Leu His Gln Ser Phe Phe Leu Tyr Leu Leu Pro Gly Leu Ser Arg Phe
            355   360   365

Val Ser Ile Gly Leu Tyr Met Pro Ala Val Gly Phe Leu Leu Leu Val
    370   375   380

Leu Gly Leu Lys Ala Leu Glu Leu Trp Met Gln Leu His Glu Ala Gly
385   390   395   400

Met Gly Leu Glu Glu Pro Gly Gly Ala Pro Gly Pro Ser Val Pro Leu
            405   410   415

Pro Pro Ser Gln Gly Val Gly Leu Ala Ser Leu Val Ala Pro Leu Leu
            420   425   430

Ile Ser Gln Ala Met Gly Leu Ala Leu Tyr Val Leu Pro Val Leu Gly
            435   440   445

Gln His Val Ala Thr Gln His Phe Pro Val Ala Glu Ala Glu Ala Val
    450   455   460

Val Leu Thr Leu Leu Ala Ile Tyr Ala Ala Gly Leu Ala Leu Pro His
465   470   475   480

Asn Thr His Arg Val Val Ser Thr Gln Ala Pro Asp Arg Gly Trp Met
            485   490   495

Ala Leu Lys Leu Val Ala Leu Ile Tyr Leu Ala Leu Gln Leu Gly Cys
            500   505   510

Ile Ala Leu Thr Asn Phe Ser Leu Gly Phe Leu Leu Ala Thr Thr Met
            515   520   525

Val Pro Thr Ala Ala Leu Ala Lys Pro His Gly Pro Arg Thr Leu Tyr
    530   535   540

Ala Ala Leu Leu Val Leu Thr Ser Pro Ala Ala Thr Leu Leu Gly Ser
545   550   555   560

Leu Phe Leu Trp Arg Glu Leu Gln Glu Ala Pro Leu Ser Leu Ala Glu
             565   570   575

Gly Trp Gln Leu Phe Leu Ala Ala Leu Ala Gln Gly Val Leu Glu His
             580   585   590

His Thr Tyr Gly Ala Leu Leu Phe Pro Leu Leu Ser Leu Gly Leu Tyr
             595   600   605

Pro Cys Trp Leu Leu Phe Trp Asn Val Leu Phe Trp Lys
    610   615   620

<210> 103
<211> 287
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (263)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 103
Met Ala Leu Leu Pro Ile Phe Phe Gly Ala Leu Arg Ser Val Arg Cys
  1   5   10   15

Ala Arg Gly Lys Asn Ala Ser Asp Met Pro Glu Thr Ile Thr Ser Arg
             20   25   30

Asp Ala Ala Arg Phe Pro Ile Ile Ala Ser Cys Thr Leu Leu Gly Leu
             35   40   45

Tyr Leu Phe Phe Lys Ile Phe Ser Gln Glu Tyr Ile Asn Leu Leu Leu
             50   55   60

Ser Met Tyr Phe Phe Val Leu Gly Ile Leu Ala Leu Ser His Thr Ile
 65   70   75   80

Ser Pro Phe Met Asn Lys Phe Phe Pro Ala Ser Phe Pro Asn Arg Gln
             85   90   95

Tyr Gln Leu Leu Phe Thr Gln Gly Ser Gly Glu Asn Lys Glu Glu Ile
             100   105   110

Ile Asn Tyr Glu Phe Asp Thr Lys Asp Leu Val Cys Leu Gly Leu Ser
             115   120   125

Ser Ile Val Gly Val Trp Tyr Leu Leu Arg Lys His Trp Ile Ala Asn
             130   135   140

Asn Leu Phe Gly Leu Ala Phe Ser Leu Asn Gly Val Glu Leu Leu His
145   150   155   160

Leu Asn Asn Val Ser Thr Gly Cys Ile Leu Leu Gly Gly Leu Phe Ile
             165   170   175

Tyr Asp Val Phe Trp Val Phe Gly Thr Asn Val Met Val Thr Val Ala

```
                  180                      185                      190
Lys Ser Phe Glu Ala Pro Ile Lys Leu Val Phe Pro Gln Asp Leu Leu
        195                 200                 205

Glu Lys Gly Leu Glu Ala Asn Asn Phe Ala Met Leu Gly Leu Gly Asp
    210                 215                 220

Val Val Ile Pro Gly Ile Phe Ile Ala Leu Leu Leu Arg Phe Asp Ile
225                 230                 235                 240

Ser Leu Lys Lys Asn Thr His Thr Tyr Phe Tyr Thr Ser Phe Ala Ala
                245                 250                 255

Tyr Ile Phe Gly Leu Gly Xaa Tyr His Leu His His Ala His Leu Gln
                260                 265                 270

Ala Cys Ser Val Met Arg Ser Gln Ile Leu Arg Ile Gln Arg Gln
        275                 280                 285
```

```
<210> 104
<211> 31
<212> PRT
<213> Homo sapiens

<400> 104
Met Ser Arg Leu Leu Leu Leu Phe Gly Arg Leu Cys Ser Leu Trp Cys
 1               5                   10                  15

Leu Ser Trp Leu Tyr Ser Thr Asp Thr Arg Pro Leu Leu Arg Gly
                20                  25                  30
```

```
<210> 105
<211> 77
<212> PRT
<213> Homo sapiens

<400> 105
Met Leu Pro Arg Leu Val Leu Asn Ser Trp Ala Cys Pro Pro Gln Pro
 1               5                   10                  15

Pro Lys Val Leu Glu Leu Gln Ala Cys Ala Thr Ile Ser Ser Leu Ile
                20                  25                  30

Thr Leu Phe Leu Met Phe Ile Lys Ser Ser His Pro Leu Ser Leu Ala
            35                  40                  45

Glu Ala Ser Gln Glu Gly Gln Asn Gln Leu Gln Ser Thr Ile Ser Asp
    50                  55                  60

Pro Glu Thr Trp Ile Leu Phe Val His Leu Asn Val Thr
65                  70                  75
```

<210> 106
<211> 44
<212> PRT
<213> Homo sapiens

<400> 106
Met Val Phe Leu Val Phe Tyr Val Leu Arg Ala Leu Lys Cys Asn Ser
1   5   10   15

Ser Tyr His Ser Cys Thr Asn Val Leu Thr Gln Ile Ala Ser Gln Ile
            20   25   30

Asp Lys Thr Leu Asn Asn Phe Ser Leu Lys Lys Cys
        35   40

<210> 107
<211> 41
<212> PRT
<213> Homo sapiens

<400> 107
Met Asn Pro Cys Leu Ser Ile Ile Phe Leu Leu Thr Pro Val Leu Leu
1   5   10   15

Ser His Pro Leu Gln Ser Leu His Phe Leu Leu Lys Val Asp Leu Asp
            20   25   30

Phe Ser Leu Ser Cys Ser Ile Cys Thr
        35   40

<210> 108
<211> 69
<212> PRT
<213> Homo sapiens

<400> 108
Met Thr Val Tyr Leu Leu Lys Thr His Pro Cys Phe Phe Val Ala Tyr
1   5   10   15

Gln Met Gln Val Ala Leu Ile Ile Leu Leu Pro Gly Leu Arg Asn Ser
            20   25   30

Lys Thr Val Thr Met Pro Leu Ser Pro Ala Leu Leu Pro Thr Leu Leu
            35   40   45

Phe Phe Pro Ser Pro Thr Pro Phe Phe His Pro Phe Leu Ser Val Leu
        50   55   60

Cys Cys Phe Lys Tyr
    65

<210> 109
<211> 48
<212> PRT

<213> Homo sapiens

<220>
<221> SITE
<222> (43)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 109
```
Met His Ala Thr Cys Thr Arg Thr Trp Arg Ala Gln Val Ser Leu His
 1               5                  10                  15

Gln Pro Pro Cys Ser Arg Asp Trp Lys Ile Cys His Leu Leu Val Val
            20                  25                  30

Leu Ser Leu Pro Pro Pro Thr Pro Ala Arg Xaa Pro Glu Phe Leu Asn
        35                  40                  45
```

<210> 110
<211> 192
<212> PRT
<213> Homo sapiens

<400> 110
```
Met Ile Arg Asn Asp Gln Asp Ser Leu Met Gln Leu Leu Gln Leu Gly
 1               5                  10                  15

Leu Val Val Leu Gly Ser Gln Glu Ser Gln Glu Ser Asp Leu Ser Lys
            20                  25                  30

Gln Leu Ile Ser Val Ile Ile Gly Leu Gly Val Ala Leu Leu Leu Val
        35                  40                  45

Leu Val Ile Met Thr Met Ala Phe Val Cys Val Arg Lys Ser Tyr Asn
    50                  55                  60

Arg Lys Leu Gln Ala Met Lys Ala Ala Lys Glu Ala Arg Lys Thr Ala
65                  70                  75                  80

Ala Gly Val Met Pro Ser Ala Pro Ala Ile Pro Gly Thr Asn Met Tyr
            85                  90                  95

Asn Thr Glu Arg Ala Asn Pro Met Leu Asn Leu Pro Asn Lys Asp Leu
            100                 105                 110

Gly Leu Glu Tyr Leu Ser Pro Ser Asn Asp Leu Asp Ser Val Ser Val
        115                 120                 125

Asn Ser Leu Asp Asp Asn Ser Val Asp Val Asp Lys Asn Ser Gln Glu
    130                 135                 140

Ile Lys Glu His Arg Pro Pro His Thr Pro Pro Glu Pro Asp Pro Glu
145                 150                 155                 160

Pro Leu Ser Val Val Leu Leu Gly Arg Gln Ala Gly Ala Ser Gly Gln
            165                 170                 175
```

Leu Glu Gly Pro Ser Tyr Thr Asn Ala Gly Leu Asp Thr Thr Asp Leu
         180   185   190

<210> 111
<211> 71
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (64)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 111
Met Ala His Val Val Val Ala Arg Asn Glu Cys Leu Ile Arg Ala Phe
  1   5   10   15

Leu Phe Leu Leu His Cys Val Ser Leu Leu Pro Ser Pro Gly Glu Val
        20   25   30

Asn Ile Arg His Thr Leu Phe Thr Val Glu Glu Arg Leu Thr Thr Pro
        35   40   45

Arg Ala Leu Lys Leu Ser Leu Ser Leu Ile Val Ser Leu His Ala Xaa
   50   55   60

Cys Arg Lys Gln Glu Cys Ser
 65   70

<210> 112
<211> 35
<212> PRT
<213> Homo sapiens

<400> 112
Met Arg Leu Thr Glu Lys Asp Thr Val Leu Phe Thr Lys Gly Val Leu
  1   5   10   15

Phe Leu His Leu Phe Ile Asn Ala Leu Phe Trp Tyr Cys Lys Phe Gly
        20   25   30

His Asn Phe
        35

<210> 113
<211> 59
<212> PRT
<213> Homo sapiens

<400> 113
Met Thr Ser Val Ser Thr Gln Leu Ser Leu Val Leu Met Ser Leu Leu
  1   5   10   15

Leu Val Leu Pro Val Val Glu Ala Val Glu Ala Gly Asp Ala Ile Ala

```
                    20                   25                         30
Leu Leu Leu Gly Val Val Leu Ser Ile Thr Gly Ile Cys Ala Cys Leu
          35                    40                  45

Gly Val Tyr Ala Arg Lys Arg Asn Gly Gln Met
      50                    55
```

<210> 114
<211> 28
<212> PRT
<213> Homo sapiens

<400> 114
```
Met Asn Ser Phe Trp Ser Lys Leu Leu Val Leu Pro Leu Leu Ala Pro
  1               5               10                  15

Leu Ser Met Ala Arg Ala Ser Ala Cys Gln Arg Trp
          20                    25
```

<210> 115
<211> 24
<212> PRT
<213> Homo sapiens

<400> 115
```
Met Met Arg Leu Leu Asp Leu Arg Ile Phe Leu Met Ile His His Lys
  1               5               10                  15

Ala Lys Ser Trp Glu Ser His Thr
              20
```

<210> 116
<211> 34
<212> PRT
<213> Homo sapiens

<400> 116
```
Met Pro Leu Ser Leu Leu Leu Ile Val Trp Lys Leu Glu Leu Cys Val
  1               5               10                  15

Gly Ser Ala Leu Val Leu Ile His Thr Gln Arg Arg Tyr Ile Ile Leu
              20                    25                  30

Gln Val
```

<210> 117
<211> 77
<212> PRT
<213> Homo sapiens

<400> 117
```
Met Leu Leu Ala Thr Leu Leu Leu Leu Leu Leu Gly Gly Ala Leu Ala
```

```
 1                5                    10                   15

His Pro Asp Arg Ile Ile Phe Pro Asn His Ala Cys Glu Asp Pro Pro
            20                  25                  30

Ala Val Leu Leu Glu Val Gln Gly Thr Leu Gln Arg Pro Leu Val Arg
            35                  40                  45

Asp Ser Arg Thr Ser Pro Ala Asn Cys Thr Trp Leu Thr Lys Arg Val
       50                  55                  60

Gln Gln Met Leu Leu Phe His Ser Tyr Gly Ile Ala Gln
65                  70                  75
```

<210> 118
<211> 43
<212> PRT
<213> Homo sapiens

<400> 118
```
Met Thr Gly Val Phe Lys Leu Pro Leu Leu Phe Trp Val His Glu Ala
 1                5                    10                   15

Ser Val Gly Gly Cys Pro Tyr Val Lys Leu Val Glu Phe Glu Glu Met
            20                  25                  30

Leu Thr Leu Tyr Gly Ile Leu Leu Ile Leu Phe
            35                  40
```

<210> 119
<211> 45
<212> PRT
<213> Homo sapiens

<400> 119
```
Met Gln Leu Ala Pro Phe Ile Ser Ile Pro Val Leu Ser Gly Thr Thr
 1                5                    10                   15

Pro Trp Thr Ala Val Phe Arg Ala Ser Ser Ile Cys Thr Pro Leu Leu
            20                  25                  30

Thr Leu Ser Ala Ala Gly Met Leu Val Glu Ser Ser Leu
            35                  40                  45
```

<210> 120
<211> 28
<212> PRT
<213> Homo sapiens

<400> 120
```
Met Pro Pro Leu Ser Asp Ile Leu Leu Thr Val Ala Val Val Ala Phe
 1                5                    10                   15

Glu Met Thr Gly His Ile Tyr Ile Trp Pro His Thr
            20                  25
```

```
<210> 121
<211> 62
<212> PRT
<213> Homo sapiens

<400> 121
Met Glu Leu Pro Cys Asp Cys Ser Lys Leu Leu Tyr Cys Lys Phe Ser
 1               5                  10                  15

Val Trp His Leu Pro Val Asn Ala Met Lys Leu Leu Ile Ile Phe Leu
            20                  25                  30

Lys Val Leu His Cys Leu Phe Phe Leu Leu Leu Cys Lys Phe Leu Tyr
        35                  40                  45

Thr Leu Ile Val Ile Leu Thr Asp Lys Tyr Ser Ile Leu Asn
    50                  55                  60


<210> 122
<211> 86
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (68)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (72)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 122
Met Pro Val Ser Trp Gly Cys Pro Ser Lys Thr Pro Gln Thr Arg Ala
 1               5                  10                  15

Tyr Thr Arg Cys Val Tyr Phe Leu Met Val Leu Glu Ala Gly Val Gly
            20                  25                  30

Gly His Ser Val Ser Arg Val Gly Ser Leu Glu Val Pro Pro Trp Leu
        35                  40                  45

Val Ala Ala Asn Asn Phe Pro His Leu Met Trp Ser Ser Phe Cys Val
    50                  55                  60

Gly Pro His Xaa Val Phe Leu Xaa Asp Pro Ser Leu Pro Asp Pro Gly
 65                  70                  75                  80

Pro Pro Asn Asn Leu Thr
                85


<210> 123
<211> 63
```

<212> PRT
<213> Homo sapiens

<400> 123
Met Cys Tyr Phe Leu Glu Ile Ser Leu Leu Met Val Phe Ala Leu Asn
1   5   10   15

Ile Lys Ala Ala Tyr Gly Cys Cys Asn Ile Asn Gly Thr Glu Val His
            20   25   30

Arg Ala Lys Gly Pro Val Ser Val Pro Phe Pro Leu Ser Arg Pro Leu
            35   40   45

Ser Gly Thr Pro Leu Leu Asp Arg Leu Arg Pro Phe Gln Thr Leu
        50   55   60

<210> 124
<211> 35
<212> PRT
<213> Homo sapiens

<400> 124
Met Pro Leu Pro Ser Ser Phe Pro Leu Pro Val Phe Leu Ser Ser Cys
1   5   10   15

Pro Phe Leu Met Ser Val Ser Ile Gly Phe Leu Ile Leu Val Phe Asn
            20   25   30

Val His Pro
        35

<210> 125
<211> 31
<212> PRT
<213> Homo sapiens

<400> 125
Met Phe Ile Phe Cys Val Ser Leu Ala Phe Leu Pro Arg Phe Ile Ser
1   5   10   15

Pro Gln Ser Cys Glu Trp Ala Gly Leu Ser Leu Val Trp His His
            20   25   30

<210> 126
<211> 40
<212> PRT
<213> Homo sapiens

<400> 126
Met Lys Asn Asn Thr Gln Lys Arg Leu Phe Leu Trp Gly Glu Leu Leu
1   5   10   15

Leu Gln Asp Leu Ala Leu Ile Leu Tyr Leu Ser Ile Phe Leu Lys Ser
            20   25   30

Thr Leu Thr Asn Leu Asn Leu Phe
            35   40

<210> 127
<211> 27
<212> PRT
<213> Homo sapiens

<400> 127
Met Leu Asn Val Phe Phe Ser Leu Ile Leu Phe Phe Ser Pro Asn Arg
 1   5   10   15

Ala Leu Pro Ala Ile Ser Ser Cys Ile Thr Phe
            20   25

<210> 128
<211> 68
<212> PRT
<213> Homo sapiens

<400> 128
Met Arg Ala Val Gly Glu Arg Leu Leu Leu Lys Leu Gln Arg Leu Pro
 1   5   10   15

Gln Ala Glu Pro Val Glu Ile Val Ala Phe Ser Val Ile Ile Leu Phe
            20   25   30

Thr Ala Thr Val Leu Leu Leu Leu Leu Ile Ala Cys Ser Cys Cys Cys
            35   40   45

Thr His Cys Cys Cys Pro Glu Arg Arg Gly Arg Lys Val Gln Val Gln
        50   55   60

Pro Thr Pro Pro
 65

<210> 129
<211> 87
<212> PRT
<213> Homo sapiens

<400> 129
Met Asp Pro Arg Arg Val Thr Ala Cys Cys His Val Trp Thr Val Gly
 1   5   10   15

Leu Phe Cys Ile Trp Ala Val Gly Leu Ser Cys Ser Leu Ser Leu Ser
            20   25   30

His Val Ile Val Trp Leu Ser Gly Ala Gly Cys Thr Leu Ile Cys Glu
            35   40   45

Asp Asn Pro Phe Leu Leu Leu Phe Ser Gln Tyr Leu Gln Pro His His
    50   55   60

Pro Glu Ile Met Lys Pro Phe Ile Leu Gly His Lys Ser Ser Asn Gly
65   70   75   80

Gly Leu Ser Pro Pro Ser Ala
              85

<210> 130
<211> 63
<212> PRT
<213> Homo sapiens

<400> 130
Met Phe Tyr Met Val Cys Val Leu Gly Ser Gly Ala Gln Pro Leu Ser
 1   5   10   15

Glu Leu Ala Tyr Leu Ala Lys Leu Pro Thr Leu Gln Val Gly Lys Tyr
          20   25   30

Asn Pro Leu Phe Asn Lys Ala His Pro Leu His Pro Val Leu Thr Thr
         35   40   45

Phe Cys Glu Cys Ala Val Ile Phe Ser Cys Ser Ile Ala Arg Trp
    50   55   60

<210> 131
<211> 54
<212> PRT
<213> Homo sapiens

<400> 131
Met Arg Phe Gln Ser Tyr Leu Trp Pro Ser Arg Ile Leu Val Gly Thr
 1   5   10   15

Tyr Cys Ile Ala Ala Glu Val Leu Phe Pro Ser Ala Leu Ala Ser Cys
          20   25   30

Gly Pro Val Trp Gln Gly Gly Ala Pro Thr Lys Ser Trp Gln Pro Gly
         35   40   45

Ala Lys Thr Ile Ile Pro
        50

<210> 132
<211> 40
<212> PRT
<213> Homo sapiens

<400> 132
Met Arg Arg Trp Ala Gly Phe Gly Lys Ser Pro Gln Phe Trp Trp Thr

```
        1                  5                      10                          15
Gly Ile Leu Val Ala Leu Gly Ala Ala Leu Leu Gly Gly Pro Arg Leu
                    20                      25                      30

Gly Arg Arg Leu Thr Phe Gly Leu
            35                  40
```

<210> 133
<211> 68
<212> PRT
<213> Homo sapiens

<400> 133
```
Met Ala Leu Ala Ile Phe Ile Pro Val Leu Ile Ile Ser Leu Leu Leu
  1                  5                      10                      15

Gly Gly Ala Tyr Ile Tyr Ile Thr Arg Cys Arg Tyr Tyr Ser Asn Leu
                    20                      25                      30

Arg Leu Pro Leu Met Tyr Ser His Pro Tyr Ser Gln Ile Thr Val Glu
            35                      40                      45

Thr Glu Phe Asp Asn Pro Ile Tyr Glu Thr Gly Glu Thr Arg Glu Tyr
        50                      55                      60

Glu Val Ser Ile
 65
```

<210> 134
<211> 47
<212> PRT
<213> Homo sapiens

<400> 134
```
Met Gly Phe Leu Phe Leu His Ile Leu Pro Ser Ile Ile Asn Thr Arg
  1                  5                      10                      15

Ser Ala Pro Gln Pro Thr Ser Cys Arg Met Gln Pro Glu Gln Gln Pro
                    20                      25                      30

His Ser Thr Leu Lys Pro Val Ile Leu Gly Met Met Ile Ile Ser
            35                      40                      45
```

<210> 135
<211> 76
<212> PRT
<213> Homo sapiens

<400> 135
```
Met Ser Gly Leu Val Gly Gly Gly Ser Arg Cys Ser Lys Val Arg Phe
  1                  5                      10                      15
```

Arg Cys Phe Asn Gly Asp Ser Leu Leu Val Leu Val Leu Gln His His
            20   25   30

Phe Arg Leu Cys Ser Trp Cys Leu Ala Pro Ser Leu Phe Leu Leu Leu
            35   40   45

Ser Cys Gln Val Val Ser Thr Met Met Glu Gln Asp Pro Val Ile Tyr
        50   55   60

Asp Asp Asp Asp Asp Leu Pro Asn Tyr Phe Ser Val
65   70   75

<210> 136
<211> 54
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (32)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (39)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 136
Met Phe Leu Glu Leu Pro Met Gln His Ser Asp Val Leu Leu Phe Leu
  1   5   10   15

Val Cys Trp Lys Ala Met Gly Ser Lys Lys Ser Pro Ser His Phe Xaa
            20   25   30

Pro Glu Val Gly Gly Ile Xaa Pro Ser Phe Gly Met Leu Asn Val Thr
            35   40   45

Leu Leu Arg Ser Leu Thr
        50

<210> 137
<211> 54
<212> PRT
<213> Homo sapiens

<400> 137
Met Leu Val Leu Phe Pro Leu Leu Tyr Arg Gly Trp Ser Pro Val Pro
  1   5   10   15

Gly Thr Ala Glu Gly Gly Met Cys Cys Cys Cys Leu Cys Ile Ser Arg
            20   25   30

Tyr Ser Leu Leu Thr Ser Ser Gln Asp Lys Glu Pro Pro Tyr Glu Met
            35   40   45

Ser Ser Ser Glu Leu Ser
        50

<210> 138
<211> 35
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (33)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 138
Met Thr Cys Tyr Glu Val Ile Leu Phe Phe Ile Lys Leu Phe Ser Asp
 1   5   10   15

Met Gly Lys Tyr Lys Glu Cys Lys Glu Phe Lys Lys Gln Arg Thr Lys
            20   25   30

Xaa Tyr Met
        35

<210> 139
<211> 80
<212> PRT
<213> Homo sapiens

<400> 139
Met Lys Ala Gln Pro Leu Glu Ala Leu Leu Leu Val Ala Leu Val Leu
 1   5   10   15

Ser Phe Cys Gly Val Trp Phe Glu Asp Trp Leu Ser Lys Trp Arg Phe
            20   25   30

Gln Cys Ile Phe Gln Leu Ala His Gln Pro Ala Leu Val Asn Ile Gln
            35   40   45

Phe Arg Gly Thr Val Leu Gly Ser Glu Thr Phe Leu Gly Ala Glu Glu
        50   55   60

Asn Ser Ala Asp Val Arg Ser Trp Gln Thr Leu Ser Tyr Phe Glu Leu
 65   70   75   80

<210> 140
<211> 67
<212> PRT
<213> Homo sapiens

<400> 140
Met Ala Ala Ser Val Gly Arg Ala Thr Arg Ser Ala Ala Ala His Leu
 1   5   10   15

Thr Gln Leu Pro Pro Ala Pro Arg Ala Gln Arg Thr Ser Pro Ala Gln

```
                20                    25                    30
Pro Asp Glu Gly Lys Arg Arg Asp Ala Asp Pro Trp Arg Thr Gly Pro
             35                    40                    45

Thr Val Asn Lys Thr Gly Ser Ile Pro Gly Arg Leu Arg Gly Trp Ala
     50                    55                    60

Arg Ala Glu
 65
```

<210> 141
<211> 50
<212> PRT
<213> Homo sapiens

<400> 141
```
Met Gly Trp Leu Cys Cys Glu Pro Ser Gly Leu Tyr Asn Leu Glu Lys
 1               5                   10                    15

Gln Tyr Phe Phe Phe Ser Ser Leu Gln Ala Gly Leu Pro Val Ile Val
             20                    25                    30

Ser Ser Gly Cys Thr Lys Ile Ala Tyr Gly Phe Ala Val Tyr Ser Pro
             35                    40                    45

Ser Ser
     50
```

<210> 142
<211> 54
<212> PRT
<213> Homo sapiens

<400> 142
```
Met Arg Arg Cys Val Arg His Val Leu Gly Ile Gly Leu Ile Val Leu
 1               5                   10                    15

Lys Asn Leu Tyr Phe His Lys Asn Ser Met Tyr Pro Ser Pro Lys Leu
             20                    25                    30

Ser Ser Phe Gln Glu Ala Phe Leu Phe Phe Leu Ile Leu Lys Asn
             35                    40                    45

Pro Leu Thr Leu Cys Ser
     50
```

<210> 143
<211> 49
<212> PRT
<213> Homo sapiens

<400> 143
```
Ile His Pro Ser Arg Ser Thr Leu Ser Ser Gln Leu Val Thr Leu Pro
 1               5                   10                    15
```

Leu Phe Glu Leu Val Phe Pro Ile Pro Ser Ser Gln Ser Pro Phe Ser
          20   25   30

Leu Asn Tyr Leu Ser Glu Phe Pro Leu Pro Glu His Glu Pro Cys Leu
          35   40   45

Glu

<210> 144
<211> 86
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (84)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 144
Met Thr Cys Cys Cys Leu Leu Cys Lys Leu Gln Gly Ile Phe Phe Phe
 1   5   10   15

Ser Phe Asn Ser Ser Val Leu Lys Ser Ile Leu Gly Thr Thr Arg Thr
          20   25   30

Leu Ser Ala Pro Trp Ile Gly Val Ser Val Lys Gly Thr Gln Trp Ala
          35   40   45

Leu Gly Ser Ala Arg Pro Gly Cys Gly Ser Gln Leu Thr Ser Ser Leu
          50   55   60

Gly Gly Leu Arg Gln Val Ile Cys Gln Pro His Leu Gln Lys His Asp
 65   70   75   80

Ala Lys Leu Xaa Ser Val
                85

<210> 145
<211> 57
<212> PRT
<213> Homo sapiens

<400> 145
Met His Lys Cys Asn Thr Val Thr Arg Glu Leu Leu Gln Leu Ser Leu
 1   5   10   15

Leu Ile Leu Pro Ser Gln Cys Gly Asn Cys Ala Thr Ser Thr Lys Arg
          20   25   30

Gly Pro Arg Leu Leu Lys Tyr Phe Arg Thr Ser Pro Gln Glu Gln Thr
          35   40   45

Pro Leu His Leu Asp Ser Asp Cys Ser
          50   55

```
<210> 146
<211> 87
<212> PRT
<213> Homo sapiens

<400> 146
Met Ser His Cys Ala Arg Pro Leu Phe Phe Glu Thr Phe Phe Ile Leu
 1               5                  10                  15

Leu Ser Pro Arg Leu Lys Cys Ser Gly Thr Asn Thr Val His Tyr Ser
            20                  25                  30

Leu Asp Leu Leu Gly Ser Ser Asn Ser Ala Ser Val Pro Gln Val Gly
        35                  40                  45

Gly Leu Thr Asn Ala Gln His Asp Thr Trp Leu Ile Phe Val Phe Cys
    50                  55                  60

Val Cys Val Cys Glu Pro Leu Arg Arg Pro Trp Ala Ala Phe Leu Ile
65                  70                  75                  80

Ser Val Thr Ser Ser Ile Lys
                85


<210> 147
<211> 230
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (216)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 147
Met Gly Leu Ala Leu Tyr Val Leu Pro Val Leu Gly Gln His Val Ala
 1               5                  10                  15

Thr Gln His Phe Pro Val Ala Glu Ala Glu Ala Val Val Leu Thr Leu
            20                  25                  30

Leu Ala Ile Tyr Ala Ala Gly Leu Ala Leu Pro His Asn Thr His Arg
            35                  40                  45

Val Val Ser Thr Gln Ala Pro Asp Arg Gly Trp Met Ala Leu Lys Leu
    50                  55                  60

Val Ala Leu Ile Tyr Leu Ala Leu Gln Leu Gly Cys Ile Ala Leu Thr
65                  70                  75                  80

Asn Phe Ser Leu Gly Phe Leu Leu Ala Thr Thr Met Val Pro Thr Ala
                85                  90                  95

Ala Leu Ala Lys Pro His Gly Pro Arg Thr Leu Tyr Ala Ala Leu Leu
            100                 105                 110
```

Val Leu Thr Ser Pro Ala Ala Thr Leu Leu Gly Ser Leu Phe Leu Trp
    115   120   125

Arg Glu Leu Gln Glu Ala Pro Leu Ser Leu Ala Glu Gly Trp Gln Leu
    130   135   140

Phe Leu Ala Ala Leu Ala Gln Gly Val Leu Glu His His Thr Thr Ala
145   150   155   160

Pro Cys Ser Ser His Cys Cys Pro Trp Ala Ser Thr Pro Ala Gly Cys
                165   170   175

Phe Ser Gly Met Cys Ser Ser Gly Ser Glu Ile Cys Leu Ser Gly Leu
                180   185   190

Gly Gln Arg Leu Pro Lys Asp Pro Ile Leu Pro Pro Ser Gly Glu Ile
        195   200   205

Asn Glu Cys Leu Phe Gln Gln Xaa Lys Lys Lys Lys Lys Lys Lys Lys
    210   215   220

Lys Lys Lys Lys Gly Gly
225   230

<210> 148
<211> 62
<212> PRT
<213> Homo sapiens

<400> 148
Gln Pro Ala Leu Leu Tyr Leu Val Pro Ala Cys Ile Gly Phe Pro Val
    1   5   10   15

Leu Val Ala Leu Ala Lys Gly Glu Val Thr Glu Met Phe Ser Tyr Glu
                20   25   30

Glu Ser Asn Pro Lys Asp Pro Ala Ala Val Thr Glu Ser Lys Glu Gly
            35   40   45

Thr Glu Ala Ser Ala Ser Lys Gly Leu Glu Lys Lys Glu Lys
    50   55   60

<210> 149
<211> 17
<212> PRT
<213> Homo sapiens

<400> 149
Gln Leu Ile Leu Ser Leu Leu Arg Gly Phe Cys Lys Thr Glu Arg Val
    1   5   10   15

Gly

<210> 150

<211> 15
<212> PRT
<213> Homo sapiens

<400> 150
Met Ala Leu Gly Ala Arg Glu Leu Pro Gly Ser Leu Ser Arg Trp
 1   5   10   15

<210> 151
<211> 21
<212> PRT
<213> Homo sapiens

<400> 151
Met Tyr Ser Phe Ser Val Leu Glu Ile Thr Cys Phe Ile Leu Phe Leu
 1   5   10   15

Trp Pro Ser Trp Val
            20

<210> 152
<211> 24
<212> PRT
<213> Homo sapiens

<400> 152
Met Lys Ile Lys Gln Arg Phe Ser Leu Leu Leu Phe His Cys Pro Phe
 1   5   10   15

Pro Pro Cys Cys Leu Ser Leu Gly
            20

<210> 153
<211> 40
<212> PRT
<213> Homo sapiens

<400> 153
Met Asn Gly Leu Phe Gln Leu Glu Ile Ser His Lys Leu Trp Thr Lys
 1   5   10   15

Ser Lys Thr Ser Leu Met Thr Leu Leu Ser Val Met Ala Leu Leu Trp
            20   25   30

Lys Ile Leu Trp Ser Arg Ala Ile
            35   40

<210> 154
<211> 24
<212> PRT
<213> Homo sapiens

<400> 154
Met Thr Pro Gly Leu Phe Leu Tyr Phe Val Cys Val Cys Val Ser His

```
          1                5                      10                        15

Cys Ala Gly Leu Gly Gln Leu Ser
                20


<210> 155
<211> 103
<212> PRT
<213> Homo sapiens

<400> 155
Ile Arg His Glu Leu Gly Cys Ser Trp Arg Phe Arg Ala Val Lys Ala
  1               5                  10                  15

Ala Ser Ala Gln Gly Leu Phe Leu Ser Ala Pro Gly Pro Ala Ala Arg
                20                  25                  30

Arg Cys His Gly Val Val Arg Cys Phe Ser Thr Cys Arg Ala Leu Thr
            35                  40                  45

Ala Arg Cys Thr Gly Arg Val Pro Trp Glu Ala Cys Leu Tyr Ser Ser
        50                  55                  60

Glu Pro Pro Leu Thr Glu Thr Val Ala Arg Ser Val Ser Trp Thr Cys
 65                  70                  75                  80

Glu Leu Ala Leu Thr Cys Tyr Ala Pro Arg Ala Leu Ser Gly Ala Pro
                85                  90                  95

Val Leu Cys Arg His Asp Val
                100


<210> 156
<211> 10
<212> PRT
<213> Homo sapiens

<400> 156
Val His Leu Gly Leu Pro Pro Gly Asp Ala
  1               5                  10


<210> 157
<211> 18
<212> PRT
<213> Homo sapiens

<400> 157
Arg Ala Val Lys Ala Ala Ser Ala Gln Gly Leu Phe Leu Ser Ala Pro
  1               5                  10                  15

Gly Pro


<210> 158
```

<211> 28
<212> PRT
<213> Homo sapiens

<400> 158
Gly Val Val Arg Cys Phe Ser Thr Cys Arg Ala Leu Thr Ala Arg Cys
 1   5   10   15

Thr Gly Arg Val Pro Trp Glu Ala Cys Leu Tyr Ser
             20   25

<210> 159
<211> 23
<212> PRT
<213> Homo sapiens

<400> 159
Ser Val Ser Trp Thr Cys Glu Leu Ala Leu Thr Cys Tyr Ala Pro Arg
 1   5   10   15

Ala Leu Ser Gly Ala Pro Val
             20

<210> 160
<211> 13
<212> PRT
<213> Homo sapiens

<400> 160
Asn Ser Ala Arg Ala Lys Thr Lys Glu Thr Phe Gly Gly
 1   5   10

<210> 161
<211> 46
<212> PRT
<213> Homo sapiens

<400> 161
Phe Leu Ala Ile His Phe Pro Thr Asp Phe Pro Leu Lys Pro Pro Lys
 1   5   10   15

Val Ala Phe Thr Arg Met Tyr Phe Pro Asn Ser Asn Ser Asn Gly Ser
             20   25   30

Thr Cys Leu Asp Ile Leu Trp Ser Gln Trp Ser Pro Ala Leu
         35   40   45

<210> 162
<211> 23
<212> PRT
<213> Homo sapiens

<400> 162
Leu Lys Pro Pro Lys Val Ala Phe Thr Arg Met Tyr Phe Pro Asn Ser

```
       1              5              10                    15

Asn Ser Asn Gly Ser Thr Cys
                20


<210> 163
<211> 38
<212> PRT
<213> Homo sapiens

<400> 163
Ala Gly Ile Arg His Glu Gly Thr Thr Pro Cys Phe Cys Lys Gly Leu
 1               5                  10                  15

Glu Asn Ile Tyr Pro Val Pro Phe Leu Phe Ala Phe Val Phe Ile Ile
            20                  25                  30

Leu Ala Asn Tyr Trp Lys
           35


<210> 164
<211> 44
<212> PRT
<213> Homo sapiens

<400> 164
His Ser Val Val Thr Val Val Ser Ser Thr Ile Ser Lys Val Leu Phe
 1               5                  10                  15

Ser Ile Cys Ser Pro Leu Tyr Asp Ser Asn Pro His Asp Leu Leu Val
            20                  25                  30

Asn Glu Val Ala Glu Ile Phe Thr Met Ser Ile Ile
           35                  40


<210> 165
<211> 38
<212> PRT
<213> Homo sapiens

<400> 165
Asn Ser Ala Arg Ala Gly Gln Asp Arg Arg Gly Pro Arg Val Thr Ala
 1               5                  10                  15

Glu Gln Thr Leu Pro Ala Ala Ala Ala Ala Ala Ala Leu Leu Arg Asp
            20                  25                  30

Glu Pro Glu Arg Leu Ala
           35


<210> 166
<211> 27
<212> PRT
<213> Homo sapiens
```

<220>
<221> SITE
<222> (6)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (12)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 166
Leu His His Pro His Xaa Leu Pro Leu Ala Leu Xaa Ile Gln Asn Phe
 1   5   10   15

Pro Gln Ser Leu Ala Ala Arg Leu Ser Trp Gly
            20   25

<210> 167
<211> 12
<212> PRT
<213> Homo sapiens

<400> 167
Met Ile Leu Val Phe Thr Val Lys Leu Ser Asn Val
 1   5   10

<210> 168
<211> 20
<212> PRT
<213> Homo sapiens

<400> 168
Thr Pro Val Ile Thr Val Leu Thr Ile Lys Phe Phe Gln Leu Ser Phe
 1   5   10   15

Phe Thr Glu Ile
            20

<210> 169
<211> 42
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (21)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (27)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 169

Gln Val Ala Glu Ser Ile Leu Leu Thr Asp Glu Gln Pro Lys Ala Gly
 1   5   10   15

Gln Thr Leu Leu Xaa Ala Leu Pro Ala Pro Xaa Ile Arg Asn Thr Gly
            20   25   30

Lys Glu Ile Gly Thr Ala Thr Gln Pro Ser
         35   40

<210> 170
<211> 7
<212> PRT
<213> Homo sapiens

<400> 170
Pro Gly Ser His Arg Glu Asp
 1   5

<210> 171
<211> 27
<212> PRT
<213> Homo sapiens

<400> 171
Glu His Val Trp Gly Phe Val Trp Val Thr Leu Trp Leu Pro Lys Pro
 1   5   10   15

Pro Phe Pro Thr Val Ile Ser Leu Lys Cys Leu
            20   25

<210> 172
<211> 8
<212> PRT
<213> Homo sapiens

<400> 172
Ile Arg His Glu Gly Ile Thr Gly
 1   5

<210> 173
<211> 9
<212> PRT
<213> Homo sapiens

<400> 173
Gly Phe Gly Leu Gly Asn Gly Ala Glu
 1   5

<210> 174
<211> 6
<212> PRT
<213> Homo sapiens

<400> 174
Arg Ile Tyr Met Leu Ile
  1   5

<210> 175
<211> 91
<212> PRT
<213> Homo sapiens

<400> 175
Thr His Ile Arg Lys Gln Tyr Ala Ala Val Pro Val Arg Ile Pro Gly
  1   5   10   15

Arg Pro Thr Arg Pro Pro Thr Arg Pro His Leu Pro Trp Leu Trp Gly
              20   25   30

Gly Ala Ser Met Pro Cys Val Ala Leu Gly Trp Ala Val Ala Pro His
          35   40   45

Cys Ser Ser Phe Leu Phe Thr Asn His Ala Ser Leu Leu Val Ser Ser
      50   55   60

Asp Glu Ile Thr Trp Ile Ser Trp Leu Pro Val Lys Asp Leu His Ala
  65   70   75   80

Tyr Tyr Gly Phe Phe Val Val Val Val Val Trp
                  85   90

<210> 176
<211> 25
<212> PRT
<213> Homo sapiens

<400> 176
Val Pro Val Arg Ile Pro Gly Arg Pro Thr Arg Pro Pro Thr Arg Pro
  1   5   10   15

His Leu Pro Trp Leu Trp Gly Gly Ala
              20   25

<210> 177
<211> 24
<212> PRT
<213> Homo sapiens

<400> 177
Val Ala Pro His Cys Ser Ser Phe Leu Phe Thr Asn His Ala Ser Leu
  1   5   10   15

Leu Val Ser Ser Asp Glu Ile Thr
              20

<210> 178
<211> 6

<212> PRT
<213> Homo sapiens

<400> 178
Met Leu Gln Tyr Leu Asn
  1   5

<210> 179
<211> 17
<212> PRT
<213> Homo sapiens

<400> 179
Ile Arg His Glu Val Ser Leu Pro Ser Thr Phe Ser Val Leu His Arg
  1   5   10   15

Ile

<210> 180
<211> 13
<212> PRT
<213> Homo sapiens

<400> 180
Arg Ala Arg Glu Gln Trp Gly Ser Gly Trp Ala His Ala
  1   5   10

<210> 181
<211> 101
<212> PRT
<213> Homo sapiens

<400> 181
Met Leu Leu Thr Pro His Phe Asn Val Ala Asn Pro Gln Asn Leu Leu
  1   5   10   15

Ala Gly Leu Trp Leu Glu Asn Glu His Ser Phe Thr Leu Met Ala Pro
               20   25   30

Glu Arg Ala Arg Thr His His Cys Gln Pro Glu Glu Arg Lys Val Leu
          35   40   45

Phe Cys Leu Phe Pro Ile Val Pro Asn Ser Gln Ala Gln Val Gln Pro
       50   55   60

Pro Gln Met Pro Pro Phe Cys Cys Ala Ala Ala Lys Glu Lys Thr Gln
   65   70   75   80

Glu Glu Gln Leu Gln Glu Pro Leu Gly Ser Gln Cys Pro Asp Thr Cys
                  85   90   95

Pro Asn Ser Leu Cys
               100

<210> 182
<211> 85
<212> PRT
<213> Homo sapiens

<400> 182
Arg Met Ser Thr Val Ser Pro Leu Trp Leu Gln Lys Glu Gln Glu His
  1   5   10   15

Thr Thr Ala Ser Gln Lys Arg Glu Lys Ser Cys Ser Val Ser Phe Pro
              20   25   30

Leu Ser Gln Ile Ala Lys His Arg Phe Asn His Pro Lys Cys His Pro
          35   40   45

Ser Ala Val Gln Gln Pro Arg Lys Arg Pro Arg Arg Ser Ser Ser Lys
      50   55   60

Asn Leu Trp Ala Val Ser Ala Gln Ile Leu Ala Pro Ile Leu Cys Val
65   70   75   80

Gln Ala Thr Leu Ser
                  85

<210> 183
<211> 31
<212> PRT
<213> Homo sapiens

<400> 183
Gly Leu Trp Leu Glu Asn Glu His Ser Phe Thr Leu Met Ala Pro Glu
  1   5   10   15

Arg Ala Arg Thr His His Cys Gln Pro Glu Glu Arg Lys Val Leu
              20   25   30

<210> 184
<211> 21
<212> PRT
<213> Homo sapiens

<400> 184
Glu His Thr Thr Ala Ser Gln Lys Arg Glu Lys Ser Cys Ser Val Ser
  1   5   10   15

Phe Pro Leu Ser Gln
              20

<210> 185
<211> 122
<212> PRT
<213> Homo sapiens

<400> 185

Thr Cys Ala Trp Leu Phe Gly Thr Met Gly Lys Arg Gln Asn Lys Thr
 1   5   10   15

Phe Leu Ser Ser Gly Trp Gln Trp Cys Val Leu Ala Leu Ser Gly Ala
             20   25   30

Ile Arg Val Lys Leu Cys Ser Phe Ser Ser Gln Arg Pro Ala Asn Arg
         35   40   45

Phe Trp Gly Phe Ala Thr Leu Lys Cys Gly Val Asn Ser Ile Ala Thr
     50   55   60

Thr Ser Gly Asp Arg Val Lys Tyr Ser Lys Ser Gly Arg Ser Arg Gln
65   70   75   80

Leu Tyr Ile Pro Leu Val Phe Leu Tyr Gly Pro Val Cys Leu Gly Lys
             85   90   95

Lys Ser His Ile Leu Leu Lys Gly Ser Asn Tyr Ser Ala Leu Leu Phe
         100   105   110

Cys Lys Val Leu Phe Lys Cys Ser Lys Tyr
         115   120

<210> 186
<211> 25
<212> PRT
<213> Homo sapiens

<400> 186
Lys Arg Gln Asn Lys Thr Phe Leu Ser Ser Gly Trp Gln Trp Cys Val
 1   5   10   15

Leu Ala Leu Ser Gly Ala Ile Arg Val
             20   25

<210> 187
<211> 23
<212> PRT
<213> Homo sapiens

<400> 187
Leu Lys Cys Gly Val Asn Ser Ile Ala Thr Thr Ser Gly Asp Arg Val
 1   5   10   15

Lys Tyr Ser Lys Ser Gly Arg
             20

<210> 188
<211> 19
<212> PRT
<213> Homo sapiens

<400> 188
Leu Leu Lys Gly Ser Asn Tyr Ser Ala Leu Leu Phe Cys Lys Val Leu

```
                1                    5                        10                              15

Phe Lys Cys
```

<210> 189
<211> 211
<212> PRT
<213> Homo sapiens

<400> 189
```
Met Arg Leu Phe Leu Trp Asn Ala Val Leu Thr Leu Phe Val Thr Ser
  1               5                   10                  15

Leu Ile Gly Ala Leu Ile Pro Glu Pro Glu Val Lys Ile Glu Val Leu
             20                  25                  30

Gln Lys Pro Phe Ile Cys His Arg Lys Thr Lys Gly Gly Asp Leu Met
         35                  40                  45

Leu Val His Tyr Glu Gly Tyr Leu Glu Lys Asp Gly Ser Leu Phe His
     50                  55                  60

Ser Thr His Lys His Asn Asn Gly Gln Pro Ile Trp Phe Thr Leu Gly
65                  70                  75                  80

Ile Leu Glu Ala Leu Lys Gly Trp Asp Gln Gly Leu Lys Gly Met Cys
                85                  90                  95

Val Gly Glu Lys Arg Lys Leu Ile Ile Pro Pro Ala Leu Gly Tyr Gly
             100                 105                 110

Lys Glu Gly Lys Gly Lys Ile Pro Pro Glu Ser Thr Leu Ile Phe Asn
             115                 120                 125

Ile Asp Leu Leu Glu Ile Arg Asn Gly Pro Arg Ser His Glu Ser Phe
     130                 135                 140

Gln Glu Met Asp Leu Asn Asp Asp Trp Lys Leu Ser Lys Asp Glu Val
145                 150                 155                 160

Lys Ala Tyr Leu Lys Lys Glu Phe Glu Lys His Gly Ala Val Val Asn
             165                 170                 175

Glu Ser His His Asp Ala Leu Val Glu Asp Ile Phe Asp Lys Glu Asp
             180                 185                 190

Glu Asp Lys Asp Gly Phe Ile Ser Ala Arg Glu Phe Thr Tyr Lys His
         195                 200                 205

Asp Glu Leu
     210
```

<210> 190
<211> 186
<212> PRT

<213> Homo sapiens

<400> 190
```
Glu Val Lys Ile Glu Val Leu Gln Lys Pro Phe Ile Cys His Arg Lys
 1               5                  10                 15

Thr Lys Gly Gly Asp Leu Met Leu Val His Tyr Glu Gly Tyr Leu Glu
            20                  25                 30

Lys Asp Gly Ser Leu Phe His Ser Thr His Lys His Asn Asn Gly Gln
        35                  40                 45

Pro Ile Trp Phe Thr Leu Gly Ile Leu Glu Ala Leu Lys Gly Trp Asp
    50                  55                 60

Gln Gly Leu Lys Gly Met Cys Val Gly Glu Lys Arg Lys Leu Ile Ile
65              70                 75                     80

Pro Pro Ala Leu Gly Tyr Gly Lys Glu Gly Lys Gly Lys Ile Pro Pro
            85                  90                 95

Glu Ser Thr Leu Ile Phe Asn Ile Asp Leu Leu Glu Ile Arg Asn Gly
            100                 105                110

Pro Arg Ser His Glu Ser Phe Gln Glu Met Asp Leu Asn Asp Asp Trp
        115                 120                 125

Lys Leu Ser Lys Asp Glu Val Lys Ala Tyr Leu Lys Lys Glu Phe Glu
    130                 135                 140

Lys His Gly Ala Val Val Asn Glu Ser His His Asp Ala Leu Val Glu
145                 150                 155                 160

Asp Ile Phe Asp Lys Glu Asp Glu Asp Lys Asp Gly Phe Ile Ser Ala
                165                 170                 175

Arg Glu Phe Thr Tyr Lys His Asp Glu Leu
            180                 185
```

<210> 191
<211> 633
<212> DNA
<213> Homo sapiens

<400> 191
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ATGAGGCTTT TCTTGTGGAA CGCGGTCTTG ACTCTGTTCG TCACTTCTTT GATTGGGGCT      60

TTGATCCCTG AACCAGAAGT GAAAATTGAA GTTCTCCAGA AGCCATTCAT CTGCCATCGC     120

AAGACCAAAG GAGGGGATTT GATGTTGGTC CACTATGAAG GCTACTTAGA AAAGGACGGC     180

TCCTTATTTC ACTCCACTCA CAAACATAAC AATGGTCAGC CCATTTGGTT TACCCTGGGC     240

ATCCTGGAGG CTCTCAAAGG TTGGGACCAG GGCTTGAAAG GAATGTGTGT AGGAGAGAAG     300

AGAAAGCTCA TCATTCCTCC TGCTCTGGGC TATGGAAAAG AAGGAAAAGG TAAAATTCCC     360
```

CCAGAAAGTA CACTGATATT TAATATTGAT CTCCTGGAGA TTCGAAATGG ACCAAGATCC   420

CATGAATCAT TCCAAGAAAT GGATCTTAAT GATGACTGGA AACTCTCTAA AGATGAGGTT   480

AAAGCATATT TAAAGAAGGA GTTTGAAAAA CATGGTGCGG TGGTGAATGA AAGTCATCAT   540

GATGCTTTGG TGGAGGATAT TTTTGATAAA GAAGATGAAG ACAAAGATGG GTTTATATCT   600

GCCAGAGAAT TTACATATAA ACACGATGAG TTA   633

<210> 192
<211> 18
<212> PRT
<213> Homo sapiens

<400> 192
Ser Arg Gly Thr Phe Arg Cys Phe Cys Arg Asp Phe Phe Pro Cys Phe
 1   5   10   15

Ser Asn

<210> 193
<211> 25
<212> PRT
<213> Homo sapiens

<400> 193
Gln Glu Gln Pro Val Gly Thr Ala Ala Val Val Gly Gly Gly Arg Gly
 1   5   10   15

Ser Val Ala Ala Pro Pro Cys Pro Ala
             20   25

<210> 194
<211> 72
<212> PRT
<213> Homo sapiens

<400> 194
Gly Asn Val Ala Phe Pro Ala Glu Pro Val Ser Pro Pro Ala Ser Leu
 1   5   10   15

Leu Gln Gln Pro Glu Leu Glu Ser Asp Pro Glu Arg Thr Leu Ala Met
             20   25   30

Asp Ser Ala Leu Ser Asp Pro His Asn Gly Ser Ala Glu Ala Gly Gly
             35   40   45

Pro Thr Asn Ser Thr Thr Arg Pro Pro Ser Thr Pro Glu Gly Ile Ala
         50   55   60

Leu Ala Tyr Gly Ser Leu Leu Leu
 65   70

```
<210> 195
<211> 22
<212> PRT
<213> Homo sapiens

<400> 195
Val Ser Pro Pro Ala Ser Leu Leu Gln Gln Pro Glu Leu Glu Ser Asp
 1               5                  10                  15

Pro Glu Arg Thr Leu Ala
            20


<210> 196
<211> 21
<212> PRT
<213> Homo sapiens

<400> 196
Gly Ser Ala Glu Ala Gly Gly Pro Thr Asn Ser Thr Thr Arg Pro Pro
 1               5                  10                  15

Ser Thr Pro Glu Gly
            20


<210> 197
<211> 251
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (12)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (17)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 197
Ala Cys Leu Lys Met Cys Met Met Lys Met Val Xaa Pro Gln Ala Glu
 1               5                  10                  15

Xaa Val Gly Cys Lys Ala Gly Val Glu Val Gly Val Gly Ile Leu Leu
            20                  25                  30

Gln Ala Asp Val Lys Ala Gln Gln Gln Gly Asn Glu Asp Pro Trp Asn
            35                  40                  45

Asp Asp Ile Ser Lys Ser Gln His Gly Lys Val Val Cys Phe Glu Ala
        50                  55                  60

Phe Leu Gln Gln Ile Leu Gly Lys His Gln Phe Tyr Trp Cys Leu Glu
 65                  70                  75                  80
```

Gly Leu Gly His Cys His His His Ile Gly Ala Lys Tyr Pro Glu Asp
                85   90   95

Ile Val Asp Glu Glu Ser Ala Gln Gln Asp Ala Ala Ser Ala Asp Ile
            100   105   110

Val Glu Val Gln Glu Leu Tyr Ser Ile Lys Gly Glu Gly Gln Ala Lys
        115   120   125

Lys Val Val Gly Asn Pro Val Leu Pro Gln Gln Val Pro Asp Ala Asn
    130   135   140

Asp Ala Ala Gln Ala Gln Ala His Gln Val Leu Gly Val Lys Phe Ile
145   150   155   160

Ile Asp Asp Leu Phe Leu Val Phe Pro Arg Thr Leu Cys Glu Glu Gln
            165   170   175

Leu Val Leu Ser Ile Trp Lys Ala Gly Trp Lys Lys Leu Ile His Glu
            180   185   190

Gly Ala Asp Gly Val Gly Gln Gly Gln Asp Ser Gln His Glu Glu Ile
        195   200   205

His Gly Gln Gln Glu Val Asp Val Leu Leu Gly Glu Tyr Phe Glu Lys
    210   215   220

Glu Val Glu Pro Gln Glu Cys Ala Ala Gly Asp Asp Gly Glu Ala Gly
225   230   235   240

Gly Ile Pro Ala Gly Asp Cys Phe Arg His Val
            245   250

<210> 198
<211> 28
<212> PRT
<213> Homo sapiens

<400> 198
Asp Asp Ile Ser Lys Ser Gln His Gly Lys Val Val Cys Phe Glu Ala
  1   5   10   15

Phe Leu Gln Gln Ile Leu Gly Lys His Gln Phe Tyr
            20   25

<210> 199
<211> 28
<212> PRT
<213> Homo sapiens

<400> 199
Gln Phe Tyr Trp Cys Leu Glu Gly Leu Gly His Cys His His His Ile
  1   5   10   15

Gly Ala Lys Tyr Pro Glu Asp Ile Val Asp Glu Glu

20   25

<210> 200
<211> 26
<212> PRT
<213> Homo sapiens

<400> 200
Ser Ile Lys Gly Glu Gly Gln Ala Lys Lys Val Val Gly Asn Pro Val
 1   5   10   15

Leu Pro Gln Gln Val Pro Asp Ala Asn Asp
            20   25

<210> 201
<211> 26
<212> PRT
<213> Homo sapiens

<400> 201
Leu Leu Gly Glu Tyr Phe Glu Lys Glu Val Glu Pro Gln Glu Cys Ala
 1   5   10   15

Ala Gly Asp Asp Gly Glu Ala Gly Gly Ile
            20   25

<210> 202
<211> 22
<212> PRT
<213> Homo sapiens

<400> 202
Leu Arg Ser Val Val Gln Asp His Pro Gly Gln His Gly Glu Thr Pro
 1   5   10   15

Ser Leu Leu Lys Ile Gln
            20

<210> 203
<211> 93
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (2)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (3)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 203

```
Ile Xaa Xaa Gly Gln Lys Ile Ser Pro Tyr Phe Lys Met Gln Gln Ser
1               5               10              15

Ile Asn Lys Ile Leu Ala Ile Phe Leu Asn Asp Thr Phe Phe Tyr Asn
            20              25              30

Leu Tyr Arg Lys Leu Ser Ala Arg Ala Arg His Arg Val Thr Pro Val
        35              40              45

Ile Pro Ala Leu Trp Glu Ala Lys Ala Gly Gly Ser Pro Glu Val Ser
    50              55              60

Ser Ser Arg Pro Pro Trp Pro Thr Trp Arg Asn Ser Ile Ser Thr Lys
65              70              75              80

Asn Thr Lys Gln Leu Ala Arg Cys Gly Gly Arg Arg Leu
            85              90
```

```
<210> 204
<211> 24
<212> PRT
<213> Homo sapiens
```

```
<400> 204
Tyr Phe Lys Met Gln Gln Ser Ile Asn Lys Ile Leu Ala Ile Phe Leu
1               5               10              15

Asn Asp Thr Phe Phe Tyr Asn Leu
            20
```

```
<210> 205
<211> 57
<212> PRT
<213> Homo sapiens
```

```
<220>
<221> SITE
<222> (34)
<223> Xaa equals any of the naturally occurring L-amino acids
```

```
<400> 205
Met Phe Tyr Asn Phe Val Arg Gln Leu Asp Thr Val Ser Ile Glu His
1               5               10              15

Ala Gly Lys Ser Lys Leu Lys Met Thr Val Gly Thr Lys Leu Thr Ser
            20              25              30

Gly Xaa Gly Pro Arg Lys Ser Ser Gln Ser Gly Arg Ile Ala Ala Ser
        35              40              45

Ile Thr Asp Cys Gln Gln Cys Lys Ala
    50              55
```

```
<210> 206
<211> 46
```

<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (16)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 206
Met Glu Ala Ala Ile Leu Pro Leu Trp Leu Leu Phe Leu Gly Pro Xaa
1   5   10   15

Pro Glu Val Ser Phe Val Pro Thr Val Ile Phe Asn Leu Asp Phe Pro
            20   25   30

Ala Cys Ser Ile Leu Thr Val Ser Ser Cys Leu Thr Lys Leu
        35   40   45

<210> 207
<211> 22
<212> PRT
<213> Homo sapiens

<400> 207
Leu Leu Phe Ile Leu Leu His Leu His Leu Lys Leu Val Leu Asn Cys
1   5   10   15

Ser Ala Asn Ser Leu Val
                20

<210> 208
<211> 16
<212> PRT
<213> Homo sapiens

<400> 208
Asn Ser Ala Arg Ala Ala Arg Ala Thr Phe Ser Val Gln Ser Met Gly
1   5   10   15

<210> 209
<211> 11
<212> PRT
<213> Homo sapiens

<400> 209
Met Leu Glu Arg Asn Leu Pro Gln Gly Arg Ala
1   5   10

<210> 210
<211> 97
<212> PRT

<213> Homo sapiens

<400> 210
Ala Thr Glu Pro Gln Phe Leu Gly Arg Ala Ala Ala Val Ser Ala Glu
1   5   10   15

Gly Lys Ala Val Gln Thr Ala Ile Leu Gly Gly Ala Met Ser Val Val
            20   25   30

Ser Ala Cys Val Leu Leu Thr Gln Cys Leu Arg Asp Leu Ala Gln Pro
        35   40   45

Arg Arg Gly Ala Lys Met Ser Asp His Arg Glu Arg Leu Arg Asn Ser
    50   55   60

Ala Cys Ala Val Ser Glu Gly Cys Thr Leu Leu Ser Gln Ala Leu Arg
65   70   75   80

Glu Arg Ser Ser Pro Arg Thr Leu Pro Pro Val Asn Ser Asn Ser Val
                85   90   95

Asn

<210> 211
<211> 30
<212> PRT
<213> Homo sapiens

<400> 211
Leu Gly Gly Ala Met Ser Val Val Ser Ala Cys Val Leu Leu Thr Gln
1   5   10   15

Cys Leu Arg Asp Leu Ala Gln Pro Arg Arg Gly Ala Lys Met
            20   25   30

<210> 212
<211> 25
<212> PRT
<213> Homo sapiens

<400> 212
Cys Ala Val Ser Glu Gly Cys Thr Leu Leu Ser Gln Ala Leu Arg Glu
1   5   10   15

Arg Ser Ser Pro Arg Thr Leu Pro Pro
            20   25

<210> 213
<211> 67
<212> PRT
<213> Homo sapiens

<220>
<221> SITE

<222> (62)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 213
```
Gln Phe Ser Thr Pro Lys Arg Thr Val Gly Ala Asn Arg Gln Ala Ile
1               5                   10                  15

Asn Ala Ala Leu Thr Gln Ala Thr Arg Thr Thr Val Tyr Ile Val Asp
            20                  25                  30

Ile Gln Asp Ile Asp Ser Ala Ala Arg Ala Arg Pro His Ser Tyr Leu
        35                  40                  45

Asp Ala Tyr Phe Val Phe Pro Asn Gly Ser Ala Leu Thr Xaa Asp Glu
        50                  55                  60

Leu Ser Val
 65
```

<210> 214
<211> 32
<212> PRT
<213> Homo sapiens

<400> 214
```
Leu Thr Gln Ala Thr Arg Thr Thr Val Tyr Ile Val Asp Ile Gln Asp
1               5                   10                  15

Ile Asp Ser Ala Ala Arg Ala Arg Pro His Ser Tyr Leu Asp Ala Tyr
            20                  25                  30
```

<210> 215
<211> 25
<212> PRT
<213> Homo sapiens

<400> 215
```
Asn His Gly His Ser Cys Phe Leu Cys Glu Ile Val Ile Arg Ser Gln
1               5                   10                  15

Phe His Thr Thr Tyr Glu Pro Glu Ala
            20                  25
```

<210> 216
<211> 48
<212> PRT
<213> Homo sapiens

<400> 216
```
Ser Gly Arg His Arg Val Glu Leu Gln Leu Leu Phe Pro Leu Val Arg
1               5                   10                  15
```

Val Asn Phe Glu Leu Gly Val Asn His Gly His Ser Cys Phe Leu Cys
                20   25   30

Glu Ile Val Ile Arg Ser Gln Phe His Thr Thr Tyr Glu Pro Glu Ala
                35   40   45

<210> 217
<211> 13
<212> PRT
<213> Homo sapiens

<400> 217
Lys Phe Leu Asn Trp Ser Ile Ser Asp Ala Phe Val Lys
 1   5   10

<210> 218
<211> 12
<212> PRT
<213> Homo sapiens

<400> 218
Ile Lys Ile Phe Ser Cys Cys Arg Lys Ala Trp Val
 1   5   10

<210> 219
<211> 98
<212> PRT
<213> Homo sapiens

<400> 219
Phe Leu Ser Leu Leu Leu Leu Ala Phe Ser Phe Ser Leu Phe Phe Phe
 1   5   10   15

Phe Asn Arg Lys Cys Thr Met Gln Val His Arg Pro Gln Thr Lys Leu
                20   25   30

Asp His Gln His Val His Val Gln Thr Ser Ala Val Ala Cys Thr Ala
                35   40   45

Cys Ala Pro Gln Phe Leu Gln Cys Trp Phe Val Cys Phe Leu Ile Gln
            50   55   60

His Pro Ala Gly Phe Thr Phe Gln Ala Arg Ser Val Ala Thr Pro Lys
65   70   75   80

Cys Val Leu Met Ser Ser Ser Leu Phe Ala Phe Leu Leu Thr Tyr Phe
                85   90   95

Val Tyr

<210> 220
<211> 23
<212> PRT
<213> Homo sapiens

<400> 220
Val Gln Thr Ser Ala Val Ala Cys Thr Ala Cys Ala Pro Gln Phe Leu
1   5   10   15

Gln Cys Trp Phe Val Cys Phe
            20

<210> 221
<211> 19
<212> PRT
<213> Homo sapiens

<400> 221
Ser Val Ala Thr Pro Lys Cys Val Leu Met Ser Ser Ser Leu Phe Ala
1   5   10   15

Phe Leu Leu

<210> 222
<211> 33
<212> PRT
<213> Homo sapiens

<400> 222
Ser Gln His Pro Glu Leu Gln Glu Gly Lys Ile Ser Ser Gln Ile Glu
1   5   10   15

Phe Tyr Ile Tyr His Phe Phe Gly Thr Phe Ser Pro Gln Asp Ser Asn
            20   25   30

Ile

<210> 223
<211> 141
<212> PRT
<213> Homo sapiens

<400> 223
Met Asn Ala Arg Gly Leu Gly Ser Glu Leu Lys Asp Ser Ile Pro Val
1   5   10   15

Thr Glu Leu Ser Ala Ser Gly Pro Phe Glu Ser His Asp Leu Leu Arg
            20   25   30

Lys Gly Phe Ser Cys Val Lys Asn Glu Leu Leu Pro Ser His Pro Leu
            35   40   45

Glu Leu Ser Glu Lys Asn Phe Gln Leu Asn Gln Asp Lys Met Asn Phe

```
        50                      55                      60

Ser Thr Leu Arg Asn Ile Gln Gly Leu Phe Ala Pro Leu Lys Leu Gln
 65                 70                  75                  80

Met Glu Phe Lys Ala Val Gln Gln Val Gln Arg Leu Pro Phe Leu Ser
                 85                  90                  95

Ser Ser Asn Leu Ser Leu Asp Val Leu Arg Gly Asn Asp Glu Thr Ile
            100                 105                 110

Gly Phe Glu Asp Ile Leu Asn Asp Pro Ser Gln Ser Glu Val Met Gly
        115                 120                 125

Glu Pro His Leu Met Val Glu Tyr Lys Leu Gly Leu Leu
    130                 135                 140
```

```
<210> 224
<211> 23
<212> PRT
<213> Homo sapiens

<400> 224
Leu Lys Asp Ser Ile Pro Val Thr Glu Leu Ser Ala Ser Gly Pro Phe
 1               5                  10                  15

Glu Ser His Asp Leu Leu Arg
            20
```

```
<210> 225
<211> 21
<212> PRT
<213> Homo sapiens

<400> 225
Gln Leu Asn Gln Asp Lys Met Asn Phe Ser Thr Leu Arg Asn Ile Gln
 1               5                  10                  15

Gly Leu Phe Ala Pro
            20
```

```
<210> 226
<211> 22
<212> PRT
<213> Homo sapiens

<400> 226
Gln Gln Val Gln Arg Leu Pro Phe Leu Ser Ser Ser Asn Leu Ser Leu
 1               5                  10                  15

Asp Val Leu Arg Gly Asn
            20
```

```
<210> 227
```

<211> 38
<212> PRT
<213> Homo sapiens

<400> 227
Glu Phe Gly Thr Arg Ala Ala Pro Gly Ser Leu Gly Ala Arg Gly Ser
 1   5   10   15

Ala Ala Thr Pro Ser Gly Arg Pro Gln Lys Leu Arg Asp Pro Ser Gly
            20   25   30

Thr Ser Gly Gln Pro Arg
         35

<210> 228
<211> 73
<212> PRT
<213> Homo sapiens

<400> 228
Asn Ser Ala Arg Gly Arg His Gln Gly Ala Trp Ala Pro Gly Ala Pro
 1   5   10   15

Pro Arg Pro His Arg Val Asp His Arg Ser Ser Gly Thr Leu Pro Ala
            20   25   30

Pro Leu Asp Ser Pro Gly Cys Cys Trp Pro Pro Ser Ser Ser Ser Ser
            35   40   45

Leu Glu Ala Leu Trp Pro Ile Gln Thr Gly Leu Phe Phe Gln Ile Met
    50   55   60

Leu Val Arg Thr Pro Gln Gln Cys Ser
 65   70

<210> 229
<211> 25
<212> PRT
<213> Homo sapiens

<400> 229
Gln Gly Ala Trp Ala Pro Gly Ala Pro Pro Arg Pro His Arg Val Asp
 1   5   10   15

His Arg Ser Ser Gly Thr Leu Pro Ala
            20   25

<210> 230
<211> 19
<212> PRT
<213> Homo sapiens

<400> 230
Leu Trp Pro Ile Gln Thr Gly Leu Phe Phe Gln Ile Met Leu Val Arg
 1   5   10   15

Thr Pro Gln

<210> 231
<211> 35
<212> PRT
<213> Homo sapiens

<400> 231
Thr Met Ser Glu Leu Leu Gly Arg Asn Leu Gly Trp Glu Ala Ser Asp
 1   5   10   15

Pro Arg Leu His Pro Trp Leu Pro Gln Pro Ala Ala Ala Ser Lys Thr
            20   25   30

Lys Arg Glu
        35

<210> 232
<211> 17
<212> PRT
<213> Homo sapiens

<400> 232
Ile Phe Arg Asn Ala His Ile Ile Val Gly Thr Asp Ser Phe Leu His
 1   5   10   15

Asp

<210> 233
<211> 15
<212> PRT
<213> Homo sapiens

<400> 233
Gly Gly Asn Lys Tyr Gln Thr Ile Asp Asn Tyr Gln Pro Tyr Pro
 1   5   10   15

<210> 234
<211> 20
<212> PRT
<213> Homo sapiens

<400> 234
Pro Leu Leu Gly Val Ser Ala Thr Leu Asn Ser Val Leu Asn Ser Asn
 1   5   10   15

Ala Ile Lys Asn
            20

<210> 235

<211> 14
<212> PRT
<213> Homo sapiens

<400> 235
Gly Ser Ala Val Ser Ala Ala Pro Gly Ile Leu Tyr Pro Gly
 1   5   10

<210> 236
<211> 280
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (137)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (138)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 236
Arg Ser Phe Ser Leu Ser Phe Ser Leu Leu Ser Pro Ser Glu Met Met
 1   5   10   15

Ala Leu Gly Ala Ala Gly Ala Thr Arg Val Phe Val Ala Met Val Ala
            20   25   30

Ala Ala Leu Gly Gly His Pro Leu Leu Gly Val Ser Ala Thr Leu Asn
            35   40   45

Ser Val Leu Asn Ser Asn Ala Ile Lys Asn Leu Pro Pro Pro Leu Gly
        50   55   60

Gly Ala Ala Gly His Pro Gly Ser Ala Val Ser Ala Ala Pro Gly Ile
65   70   75   80

Leu Tyr Pro Gly Gly Asn Lys Tyr Gln Thr Ile Asp Asn Tyr Gln Pro
                85   90   95

Tyr Pro Cys Ala Glu Asp Glu Glu Cys Gly Thr Asp Glu Tyr Cys Ala
            100   105   110

Ser Pro Thr Arg Gly Gly Asp Ala Gly Val Gln Ile Cys Leu Ala Cys
            115   120   125

Arg Lys Arg Arg Lys Arg Cys Met Xaa Xaa Ala Met Cys Cys Pro Gly
            130   135   140

Asn Tyr Cys Lys Asn Gly Ile Cys Val Ser Ser Asp Gln Asn His Phe
145   150   155   160

Arg Gly Glu Ile Glu Glu Thr Ile Thr Glu Ser Phe Gly Asn Asp His
                165   170   175

Ser Thr Leu Asp Gly Tyr Ser Arg Arg Thr Thr Leu Ser Ser Lys Met
            180   185   190

Tyr His Thr Lys Gly Gln Glu Gly Ser Val Cys Leu Arg Ser Ser Asp
            195   200   205

Cys Ala Ser Gly Leu Cys Cys Ala Arg His Phe Trp Ser Lys Ile Cys
    210   215   220

Lys Pro Val Leu Lys Glu Gly Gln Val Cys Thr Lys His Arg Arg Lys
225   230   235   240

Gly Ser His Gly Leu Glu Ile Phe Gln Arg Cys Tyr Cys Gly Glu Gly
                245   250   255

Leu Ser Cys Arg Ile Gln Lys Asp His His Gln Ala Ser Asn Ser Ser
            260   265   270

Arg Leu His Thr Cys Gln Arg His
        275   280

<210> 237
<211> 8
<212> PRT
<213> Homo sapiens

<400> 237
Ser Ala Thr Leu Asn Ser Val Leu
    1   5

<210> 238
<211> 7
<212> PRT
<213> Homo sapiens

<400> 238
Asn Ser Asn Ala Ile Lys Asn
    1   5

<210> 239
<211> 7
<212> PRT
<213> Homo sapiens

<400> 239
Gly Gly Asn Lys Tyr Gln Thr
    1   5

<210> 240
<211> 15
<212> PRT
<213> Homo sapiens

<400> 240

Asp Asn Tyr Gln Pro Tyr Pro Cys Ala Glu Asp Glu Glu Cys Gly
 1   5   10   15

<210> 241
<211> 6
<212> PRT
<213> Homo sapiens

<400> 241
Gly Val Gln Ile Cys Leu
 1   5

<210> 242
<211> 10
<212> PRT
<213> Homo sapiens

<400> 242
Pro Gly Asn Tyr Cys Lys Asn Gly Ile Cys
 1   5   10

<210> 243
<211> 6
<212> PRT
<213> Homo sapiens

<400> 243
Arg Gly Glu Ile Glu Glu
 1   5

<210> 244
<211> 18
<212> PRT
<213> Homo sapiens

<400> 244
Tyr His Thr Lys Gly Gln Glu Gly Ser Val Cys Leu Arg Ser Ser Asp
 1   5   10   15

Cys Ala

<210> 245
<211> 26
<212> PRT
<213> Homo sapiens

<400> 245
Gly Leu Cys Cys Ala Arg His Phe Trp Ser Lys Ile Cys Lys Pro Val
 1   5   10   15

Leu Lys Glu Gly Gln Val Cys Thr Lys His
            20   25

<210> 246
<211> 10
<212> PRT
<213> Homo sapiens

<400> 246
Arg Lys Gly Ser His Gly Leu Glu Ile Phe
 1   5   10

<210> 247
<211> 9
<212> PRT
<213> Homo sapiens

<400> 247
Gln Arg Cys Tyr Cys Gly Glu Gly Leu
 1   5

<210> 248
<211> 22
<212> PRT
<213> Homo sapiens

<400> 248
Cys Arg Ile Gln Lys Asp His His Gln Ala Ser Asn Ser Ser Arg Leu
 1   5   10   15

His Thr Cys Gln Arg His
            20

<210> 249
<211> 38
<212> PRT
<213> Homo sapiens

<400> 249
Glu Gly Leu Cys Glu Gly Ala Val Gly Trp Asn Gly Gly Trp His Gly
 1   5   10   15

Thr Gly Thr Arg Glu Ala Ser Ser Pro Phe Ser Ala Thr Ser Lys Arg
            20   25   30

His Ser Ala Leu Pro Glu
            35

<210> 250
<211> 76
<212> PRT
<213> Homo sapiens

<400> 250
Ser Trp Ser Leu Met Phe Ile Leu Lys Leu Ala Ser Leu Phe Arg Leu

```
 1                    5                       10                          15
Leu Ile Gln Pro Leu Ala Phe Ser Phe Asn Leu Gly Gln Lys Asn Arg
            20                  25              30

Gln His Phe Leu Pro Pro Leu Pro His His His Pro Ile Tyr Ser Phe
        35              40              45

Ser Leu Tyr Tyr His Asn Ser Pro Lys Arg Pro Lys Ser Ile Ile Lys
    50                  55              60

Ser Asn Asn Leu Ala Ser Asn Leu Asn Pro Ser Ile
65                  70              75
```

<210> 251
<211> 21
<212> PRT
<213> Homo sapiens

<400> 251
```
Lys Leu Ala Ser Leu Phe Arg Leu Leu Ile Gln Pro Leu Ala Phe Ser
 1                5                   10                      15

Phe Asn Leu Gly Gln
                20
```

<210> 252
<211> 20
<212> PRT
<213> Homo sapiens

<400> 252
```
Ser Phe Ser Leu Tyr Tyr His Asn Ser Pro Lys Arg Pro Lys Ser Ile
 1                5                   10                      15

Ile Lys Ser Asn
                20
```

<210> 253
<211> 18
<212> PRT
<213> Homo sapiens

<400> 253
```
Lys Pro Pro Pro Pro Thr Pro Pro Phe Ala Tyr Thr Thr Pro Leu Leu
 1                5                   10                      15

Leu Ser
```

<210> 254
<211> 63
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (41)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (46)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 254
Met Leu Ala Cys Arg Arg Leu Pro Met Ser Gln Asn Pro Leu Ser Met
1   5   10   15

Leu Thr Leu Asp Thr Pro Leu Lys Pro Leu Ile Val Cys Ala Ser Gly
            20   25   30

Cys Glu Val Pro Ala Pro Cys Gly Xaa Cys Ala Cys Thr Xaa Pro Ala
        35   40   45

Leu Gln Phe Leu Cys Thr Tyr Ser Ser Ser Ala Val Leu Lys Cys
    50   55   60

<210> 255
<211> 30
<212> PRT
<213> Homo sapiens

<400> 255
Leu Pro Met Ser Gln Asn Pro Leu Ser Met Leu Thr Leu Asp Thr Pro
1   5   10   15

Leu Lys Pro Leu Ile Val Cys Ala Ser Gly Cys Glu Val Pro
            20   25   30

<210> 256
<211> 13
<212> PRT
<213> Homo sapiens

<400> 256
Ala Phe Gly Asp Thr Asp Ile Arg Gln Leu Phe Phe Ala
1   5   10

<210> 257
<211> 45
<212> PRT
<213> Homo sapiens

<400> 257
Arg Gly Ile Ser Val Leu Arg Arg Val Trp Gly Gln Pro Trp Arg Leu
1   5   10   15

Gln Val Phe Ser Leu Pro Gln Gln Ser Pro Ala Gly Ala Pro Thr Gly

```
                    20                    25                    30
         Ser Gln Arg Gly Met Ala Ala Thr Asp Phe Val Gln Glu
                     35                    40                    45
```

<210> 258
<211> 23
<212> PRT
<213> Homo sapiens

<400> 258
```
Pro Glu Glu Ala Ser Phe Ala Cys Glu Gly Cys Gly Pro Pro Leu Pro
 1               5                   10                  15

Trp Ala Cys Ser Pro Gly Trp
               20
```

<210> 259
<211> 108
<212> PRT
<213> Homo sapiens

<400> 259
```
Lys Tyr Met Leu Tyr Arg Pro Gln Ala Ala Leu Asp Leu Val Ser Asp
 1               5                   10                  15

Thr Ser Asp Gln Lys Lys Pro Val Leu Arg Val Arg Gly Val Gly Pro
                20                  25                  30

Arg Cys Leu Gly Pro Ala His Arg Gly Gly Trp Thr Pro Ala Gly Ser
             35                  40                  45

Gln Pro Ala Val Thr Ser Gly Leu Leu Ala Ser Ser Ala Ser Gly Leu
          50                  55                  60

Leu Gly Ser Pro Ala Leu Cys Pro Ser Val Thr Ser Leu Ser Gly Cys
 65                  70                  75                  80

Pro Val Leu Ala Ala Leu Ser Phe Val Arg Ile Thr Pro Ser Phe Phe
                85                  90                  95

Phe Ser Pro Asn Thr Ser Ser Pro Ile Ile Leu Arg
               100                 105
```

<210> 260
<211> 28
<212> PRT
<213> Homo sapiens

<400> 260
```
Asp Gln Lys Lys Pro Val Leu Arg Val Arg Gly Val Gly Pro Arg Cys
 1               5                   10                  15

Leu Gly Pro Ala His Arg Gly Gly Trp Thr Pro Ala
             20                  25
```

<210> 261
<211> 28
<212> PRT
<213> Homo sapiens

<400> 261
Gln Pro Ala Val Thr Ser Gly Leu Leu Ala Ser Ser Ala Ser Gly Leu
 1   5   10   15

Leu Gly Ser Pro Ala Leu Cys Pro Ser Val Thr Ser
            20   25

<210> 262
<211> 151
<212> PRT
<213> Homo sapiens

<400> 262
Gln Arg Ile Ile Thr Val Ser Met Glu Asp Val Lys Ile Leu Leu Thr
 1   5   10   15

Gln Glu Asn Pro Phe Phe Arg Lys Leu Ser Ser Glu Thr Tyr Ser Gln
            20   25   30

Ala Lys Asp Leu Ala Lys Gly Ser Ile Val Leu Lys Tyr Glu Pro Asp
        35   40   45

Ser Ala Asn Pro Asp Ala Leu Gln Cys Pro Ile Val Leu Cys Gly Trp
    50   55   60

Arg Gly Lys Ala Ser Ile Arg Thr Phe Val Pro Lys Asn Glu Arg Leu
65   70   75   80

His Tyr Leu Arg Met Met Gly Leu Glu Val Leu Gly Glu Lys Lys Lys
                85   90   95

Glu Gly Val Ile Leu Thr Asn Glu Ser Ala Ala Ser Thr Gly Gln Pro
            100   105   110

Asp Asn Asp Val Thr Glu Gly Gln Arg Ala Gly Glu Pro Asn Ser Pro
        115   120   125

Asp Ala Glu Glu Ala Asn Ser Pro Asp Val Thr Ala Gly Cys Asp Pro
        130   135   140

Ala Gly Val His Pro Pro Arg
145   150

<210> 263
<211> 25
<212> PRT
<213> Homo sapiens

<400> 263

Asp Val Lys Ile Leu Leu Thr Gln Glu Asn Pro Phe Phe Arg Lys Leu
1   5   10   15

Ser Ser Glu Thr Tyr Ser Gln Ala Lys
            20   25

<210> 264
<211> 28
<212> PRT
<213> Homo sapiens

<400> 264
Ala Lys Gly Ser Ile Val Leu Lys Tyr Glu Pro Asp Ser Ala Asn Pro
1   5   10   15

Asp Ala Leu Gln Cys Pro Ile Val Leu Cys Gly Trp
            20   25

<210> 265
<211> 28
<212> PRT
<213> Homo sapiens

<400> 265
Leu His Tyr Leu Arg Met Met Gly Leu Glu Val Leu Gly Glu Lys Lys
1   5   10   15

Lys Glu Gly Val Ile Leu Thr Asn Glu Ser Ala Ala
            20   25

<210> 266
<211> 25
<212> PRT
<213> Homo sapiens

<400> 266
Ala Gly Glu Pro Asn Ser Pro Asp Ala Glu Glu Ala Asn Ser Pro Asp
1   5   10   15

Val Thr Ala Gly Cys Asp Pro Ala Gly
            20   25

<210> 267
<211> 14
<212> PRT
<213> Homo sapiens

<400> 267
Ile Leu Phe Ala Ala Ser Lys Gly Asp Asp Phe Gln Ala Asp
1   5   10

<210> 268
<211> 14

<212> PRT
<213> Homo sapiens

<400> 268
Ile Leu Phe Ala Ala Ser Lys Gly Asp Asp Phe Gln Ala Asp
 1   5   10

<210> 269
<211> 18
<212> PRT
<213> Homo sapiens

<400> 269
Leu Tyr Ala Gln Lys Leu Gly Ala Thr Cys Phe Cys Thr Asp Cys Arg
 1   5   10   15

Ser Lys

<210> 270
<211> 81
<212> PRT
<213> Homo sapiens

<400> 270
Ala Gly Ile Gln His Glu Leu Ala Cys Asp Asn Pro Gly Leu Pro Glu
 1   5   10   15

Asn Gly Tyr Gln Ile Leu Tyr Lys Arg Leu Tyr Leu Pro Gly Glu Ser
              20   25   30

Leu Thr Phe Met Cys Tyr Glu Gly Phe Glu Leu Met Gly Glu Val Thr
         35   40   45

Ile Arg Cys Ile Leu Gly Gln Pro Ser His Trp Asn Gly Pro Leu Pro
    50   55   60

Val Cys Lys Val Ala Glu Ala Ala Ala Glu Thr Ser Leu Glu Gly Gly
 65   70   75   80

Asn

<210> 271
<211> 27
<212> PRT
<213> Homo sapiens

<400> 271
Gln Pro Ser His Trp Asn Gly Pro Leu Pro Val Cys Lys Val Ala Glu
 1   5   10   15

Ala Ala Ala Glu Thr Ser Leu Glu Gly Gly Asn
              20   25

<210> 272
<211> 13
<212> PRT
<213> Homo sapiens

<400> 272
Tyr Glu Thr Gly Glu Thr Arg Glu Tyr Glu Val Ser Ile
 1   5   10

<210> 273
<211> 26
<212> PRT
<213> Homo sapiens

<400> 273
Trp Val Glu Lys Gly Glu Arg Gly Val Gly Pro Asp Thr Lys Glu Met
 1   5   10   15

Phe Ser Ala Ile Asn Gln Leu Gln Asn Lys
            20   25

<210> 274
<211> 16
<212> PRT
<213> Homo sapiens

<400> 274
Gly Thr Ser Pro Lys Cys Trp Asp Tyr Arg Glu Leu Met Lys Val Glu
 1   5   10   15

<210> 275
<211> 52
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (47)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 275
His Glu Pro Lys Val Leu Gly Leu Gln Gly Val Asp Glu Ser Gly Asp
 1   5   10   15

Val Phe Arg Ala Thr Tyr Ala Ala Phe Arg Cys Ser Pro Ile Ser Gly
            20   25   30

Leu Leu Glu Ser His Gly Ile Gln Lys Val Ser Ile Thr Phe Xaa Pro
        35   40   45

Arg Gly Arg Gly

50

<210> 276
<211> 51
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (3)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 276
Asp Tyr Xaa Gln Phe Trp Asp Val Glu Cys His Pro Leu Lys Glu Pro
 1   5   10   15

His Met Lys His Thr Leu Arg Phe Gln Leu Ser Gly Gln Ser Ile Glu
            20   25   30

Ala Glu Asn Glu Pro Glu Asn Ala Cys Leu Ser Thr Asp Ser Leu Ile
        35   40   45

Lys Ile Asp
    50

<210> 277
<211> 51
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (20)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 277
His Leu Val Lys Pro Arg Arg Gln Ala Val Ser Glu Ala Ser Ala Arg
 1   5   10   15

Ile Pro Asp Xaa Gln Leu Asp Val Thr Ala Arg Gly Val Tyr Ala Pro
            20   25   30

Glu Asp Val Tyr Arg Phe Leu Pro Thr Ser Val Gly Glu Ser Arg Thr
        35   40   45

Leu Lys Val
    50

<210> 278
<211> 34
<212> PRT
<213> Homo sapiens

<400> 278
Asn Leu Arg Asn Asn Ser Phe Ile Thr His Ser Leu Lys Phe Leu Ser

```
         1                    5                       10                      15
         Pro Arg Glu Pro Phe Tyr Val Lys His Ser Lys Tyr Ser Leu Arg Ala
                     20                      25                      30

         Gln His
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<210> 279
<211> 47
<212> PRT
<213> Homo sapiens

<400> 279
```
         Glu Asn Leu Ser Thr Ser Cys Val Ser Cys Gln Val Val Phe Val Thr
          1                   5                       10                      15

         Ser Glu Pro Ala Leu Thr Leu Pro Thr Tyr His Val Met Leu Ile Ser
                     20                      25                      30

         Pro Thr Val Pro Cys Cys Ile Gly Ser Ala Leu Arg Ala Glu Ile
                     35                      40                      45
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<210> 280
<211> 195
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (40)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (161)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 280
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         Asp Asp Asp Gly Leu Pro Phe Pro Thr Asp Val Ile Gln His Arg Leu
          1                   5                       10                      15

         Arg Gln Ile Glu Ala Gly Tyr Lys Gln Glu Val Glu Gln Leu Arg Arg
                     20                      25                      30

         Gln Val Arg Asp Ser Asp Glu Xaa Gly His Pro Ser Leu Leu Cys Pro
                     35                      40                      45

         Ser Ser Arg Ala Pro Met Asp Tyr Glu Asp Asp Phe Thr Cys Leu Lys
                50                      55                      60

         Glu Ser Asp Gly Ser Asp Thr Glu Asp Phe Gly Ser Asp His Ser Glu
            65                      70                      75                      80

         Asp Cys Leu Ser Glu Ala Ser Trp Glu Pro Val Asp Lys Lys Glu Thr
                     85                      90                      95
```

Glu Val Thr Arg Trp Val Pro Asp His Met Ala Ser His Cys Tyr Asn
            100   105   110

Cys Asp Cys Glu Phe Trp Leu Ala Lys Arg Arg His His Cys Arg Asn
            115   120   125

Cys Gly Asn Val Phe Cys Ala Gly Cys Cys His Leu Lys Leu Pro Ile
        130   135   140

Pro Asp Gln Gln Leu Tyr Asp Pro Val Leu Val Cys Asn Ser Cys Tyr
145   150   155   160

Xaa Thr His Ser Ser Leu Ser Cys Gln Gly Thr His Glu Pro Thr Ala
            165   170   175

Glu Glu Thr His Cys Tyr Ser Phe Gln Leu Asn Ala Gly Glu Lys Pro
            180   185   190

Val Gln Phe
        195

<210> 281
<211> 28
<212> PRT
<213> Homo sapiens

<400> 281
Ser Glu Ala Ser Trp Glu Pro Val Asp Lys Lys Glu Thr Glu Val Thr
 1   5   10   15

Arg Trp Val Pro Asp His Met Ala Ser His Cys Tyr
            20   25

<210> 282
<211> 10
<212> PRT
<213> Homo sapiens

<400> 282
His His Cys Arg Asn Cys Gly Asn Val Phe
 1   5   10

<210> 283
<211> 14
<212> PRT
<213> Homo sapiens

<400> 283
Arg Leu Arg Gln Ile Glu Ala Gly Tyr Lys Gln Glu Val Glu
 1   5   10

<210> 284
<211> 40

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<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (8)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (16)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 284
Val Asn Lys Ser Asn Gly Arg Xaa His Gly Arg Arg Ala Tyr Arg Xaa
 1               5                  10                  15

Ser Leu Ser Ile Ala Phe Pro Arg Lys Pro Gln Phe Arg His Arg Ser
            20                  25                  30

Pro Glu Val Ser Pro Ser Asp Leu
        35                  40


<210> 285
<211> 39
<212> PRT
<213> Homo sapiens

<400> 285
Ser Pro Ile Pro Ser Glu Glu Val Lys Glu Ile Pro His Arg Tyr Arg
 1               5                  10                  15

Gly Ser Arg Cys Pro Arg Thr Ser Asn Ser Arg Phe Gly Pro Arg Arg
            20                  25                  30

Leu Ala Pro Thr Ser Thr Thr
        35


<210> 286
<211> 39
<212> PRT
<213> Homo sapiens

<400> 286
Ser Pro Ile Pro Ser Glu Glu Val Lys Glu Ile Pro His Arg Tyr Arg
 1               5                  10                  15

Gly Ser Arg Cys Pro Arg Thr Ser Asn Ser Arg Phe Gly Pro Arg Arg
            20                  25                  30

Leu Ala Pro Thr Ser Thr Thr
        35


<210> 287
<211> 14
```

<212> PRT
<213> Homo sapiens

<400> 287
Trp Gln Glu Ala Glu Met Asp Met Ala Trp Gln Lys Ser Ile
 1   5   10

<210> 288
<211> 20
<212> PRT
<213> Homo sapiens

<400> 288
Met Ala Ser Ser Asp Glu His Ser Ser Ile Leu Gln Gly Leu Leu Ser
 1   5   10   15

His His Ser Leu
            20

<210> 289
<211> 44
<212> PRT
<213> Homo sapiens

<400> 289
Lys Arg Gln Pro Thr Ser Ala Met Lys Asp Pro Ser Arg Ser Ser Thr
 1   5   10   15

Ser Pro Ser Ile Ile Asn Glu Asp Val Ile Ile Asn Gly His Ser His
                20   25   30

Glu Asp Asp Asn Pro Phe Ala Glu Tyr Met Trp Met
            35   40

<210> 290
<211> 45
<212> PRT
<213> Homo sapiens

<400> 290
Glu Asn Glu Glu Glu Phe Asn Arg Gln Ile Glu Glu Glu Leu Trp Glu
 1   5   10   15

Glu Glu Phe Ile Glu Arg Cys Phe Gln Glu Met Leu Glu Glu Glu Glu
                20   25   30

Glu His Glu Trp Phe Ile Pro Ala Arg Asp Leu Pro Gln
            35   40   45

<210> 291
<211> 45
<212> PRT
<213> Homo sapiens

<400> 291
Thr Met Asp Gln Ile Gln Asp Gln Phe Asn Asp Leu Val Ile Ser Asp
  1   5   10   15

Gly Ser Ser Leu Glu Asp Leu Val Val Lys Ser Asn Leu Asn Pro Asn
            20   25   30

Ala Lys Glu Phe Val Pro Gly Val Lys Tyr Gly Asn Ile
        35   40   45

<210> 292
<211> 87
<212> PRT
<213> Homo sapiens

<400> 292
Met Ser His Cys Ala Arg Pro Leu Phe Phe Glu Thr Phe Phe Ile Leu
  1   5   10   15

Leu Ser Pro Arg Leu Lys Cys Ser Gly Thr Asn Thr Val His Tyr Ser
            20   25   30

Leu Asp Leu Leu Gly Ser Ser Asn Ser Ala Ser Val Pro Gln Val Gly
        35   40   45

Gly Leu Thr Asn Ala Gln His Asp Thr Trp Leu Ile Phe Val Phe Cys
        50   55   60

Val Cys Val Cys Glu Pro Leu Arg Arg Pro Trp Ala Ala Phe Leu Ile
 65   70   75   80

Ser Val Thr Ser Ser Ile Lys
                85

<210> 293
<211> 30
<212> PRT
<213> Homo sapiens

<400> 293
Val Pro Gln Val Gly Gly Leu Thr Asn Ala Gln His Asp Thr Trp Leu
  1   5   10   15

Ile Phe Val Phe Cys Val Cys Val Cys Glu Pro Leu Arg Arg
            20   25   30

<210> 294
<211> 16
<212> PRT
<213> Homo sapiens

<400> 294
Pro Arg Asp Leu Pro Ala Ser Ala Ser Gln Ser Ala Arg Ile Thr Gly
  1   5   10   15